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MICHAEL LEONARD SEED CO.

SIoux CITY, IOWA



1938
★ MAY 18 1938 ★
U. S. Department of Agriculture

*We are pleased to submit to you
our new 1938 Spring Catalog,
under our new name ~*

Michael-Leonard Seed Company

The MICHAEL-LEONARD SEED COMPANY is a consolidation of the Sioux City Seed Company of Sioux City, Iowa, and the Leonard Seed Company of Chicago, Illinois, and is not a new company, but a continuation of these two well known seed concerns, the name perpetuating the names of the founders.

There has been no change in the operations or policies of these two pioneer houses, and we believe by this consolidation we will be in better position to serve and perpetuate the standards of quality which have been instrumental in the growth of our business in the past fifty-four years and to continue the extensive growing, breeding and research program of both firms.

Michael-Leonard Seeds are sold by progressive retailers all over the United States and parts of Canada. Your dealer will be pleased to supply you with Michael-Leonard Seeds.

Prices quoted are F. O. B. our retail stores at Chicago.

MICHAEL-LEONARD SEED COMPANY **Seed Growers**

GENERAL OFFICES

Chicago, Illinois
Phone Boulevard 5910

Sioux City, Iowa
Phone 5-7967

Chicago Retail Stores

4845 Milwaukee Avenue, Phone Kildare 6010
10934 South Michigan Avenue, Pullman 1128
333 West 35th Street, Boulevard 5910

WE GIVE NO WARRANTY
express or implied as to purity,
description, quality, productive-
ness or any other matter of any
Seeds, Bulbs or Plants we send
out and we will not be in any
way responsible for the crop.



Bountiful

Culture. Beans are easily frost killed, so plant them at corn planting time, on light, dry land. Cold, wet weather will rot the seed in the ground and fresh manure causes a rank growth of vine with a lack of pods. Hand cultivated Beans can be drilled in poor soil as close as 18 inches, but in rich soil with horse cultivation, 30 inches is required. Drill 6 Beans to the foot and cover one inch deep, or plant 4 Beans to the hill, 18 to 24 inches apart. Two pounds of seed should plant 200 feet and 60 pounds an acre. Plant every other week for a succession up until August first in the latitude of Chicago. Shallow cultivation only should be given at all times and do not cultivate when the plant is in bloom as the plant will drop its blossoms; never cultivate when wet, as it causes rust. Pick Beans before the bulge of seed appears and pick them clean to continue the plants bearing. Numbers of days are from planting to first picking.

ALL BEANS PRICED AT:
Pkt., 10c; $\frac{1}{2}$ lb., 15c; lb., 30c.

Artichoke

LARGE GREEN GLOBE. Used for home garden planting and shipping; heads large, slightly elongated; scales thick at base. Quite different from Jerusalem Artichoke, which is grown for its tuberous root. Pkt., 10c; oz., 50c.

Asparagus Seed

Complete cultural directions furnished on request.

MARY WASHINGTON. The latest development of rust-resistant Asparagus; larger than the original Washington, with very tight tips of fine quality. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c.



Washington Asparagus

Bush Beans

Green Podded Varieties

BOUNTIFUL. (50 days). Vine light green, 18 inches, upright, strong growing bush. Stringless at all stages, somewhat inclined to be fibrous as pod ages. Very fine flavor. Exceptional cropper. Pod light green, average 7 inches long by $\frac{1}{2}$ inch wide, thin and flat. Very meaty. Excellent market garden and shipping variety; also good for home garden. Seed pale yellow, medium large, kidney shape. Outsells all other varieties 25 to 1 on the Chicago market.

GIANT STRINGLESS GREEN POD. (53 days). An excellent Bean for the market gardener and shipper; and widely used for canning. Very heavy, stocky vine. Pods round, 6 to $6\frac{1}{2}$ inches long, of exceptionally fine quality, stringless throughout entire growth. Seed deep yellow. Dependable variety for the home garden.

HORTICULTURAL, DWARF. (54 days). Vine very productive, compact, upright, with large leaves. Pods 4 to 5 inches long, wide, thick, stringless, with splashes of bright red on a yellowish ground. Seed large, oval, plump and nearly covered with splashes of bright red. One of the most popular and satisfactory Beans in the Chicago area.

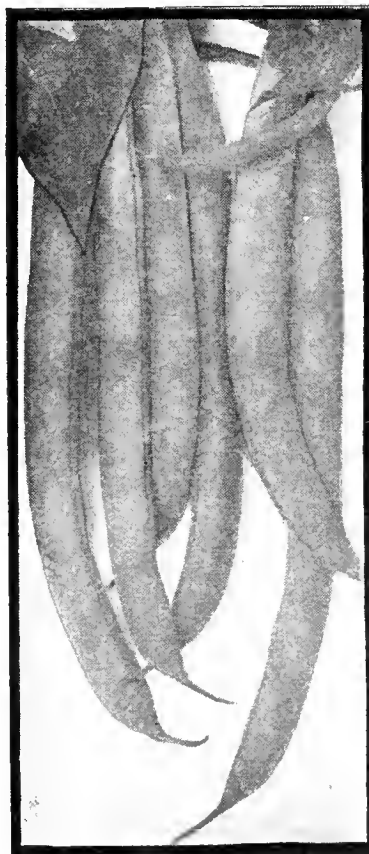
FULL MEASURE. (54 days). An excellent market gardeners' and canners' Bean. Plants hardy, branching freely and bearing a good crop of pods. Pods 6 to $6\frac{1}{2}$ inches, round, straight, deep green and strictly stringless. Seeds brown mottled with yellow.

REFUGEE or 1000 to 1. (68 days). Vine is medium light, 14-inch bush with a spreading habit of growth. Small, pointed leaves; thick growth of leaves. Pods medium light, 5 inches long, round, curved, very meaty, crisp, well flavored but has a most decided string at all stages. This is the original Refugee and is now replaced by the stringless type. Seed purple with buff spots.

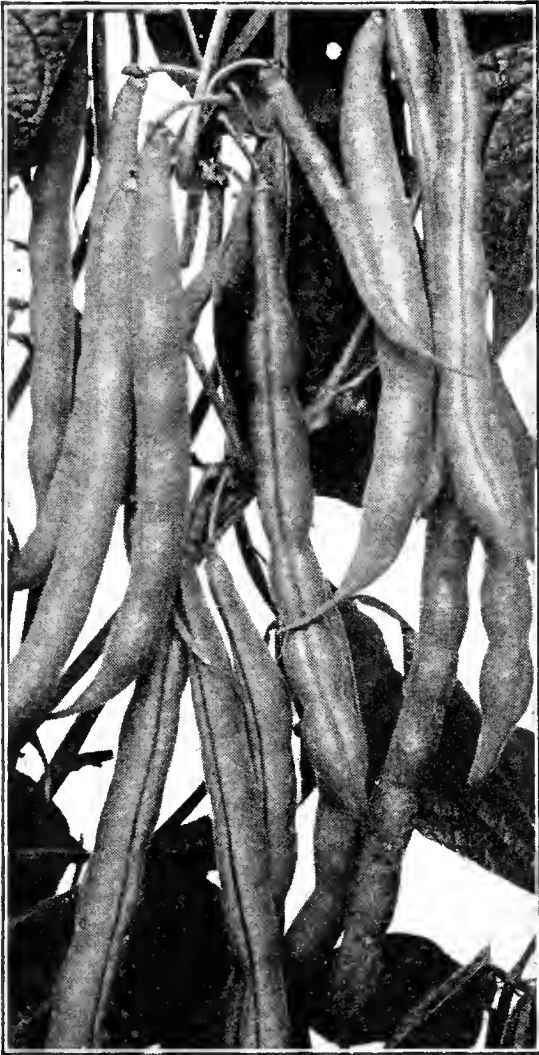
REFUGEE, STRINGLESS. (68 days). A stringless type of the above with a slightly lighter pod and a deeper purple colored seed, otherwise is an equal to the above in every way.

BURPEE'S STRINGLESS GREEN POD. (50 days). Plants large, very productive. Pods curved, round, $5\frac{1}{2}$ to 6 inches long; medium green, meaty, stringless and of excellent quality. One of the best varieties for canning cut Beans and very popular with home gardeners. Seeds dark brown.

DIXIE WHITE. Vines light green, 18 inches high. Pods light green, 4 inches long, round and straight; stringless when young. A most wonderful yielder. Excellent as a dry shell Bean; flavor equal or better than Navy.



Giant Stringless Green Pod



Full Measure

NAVY.

GREAT NORTHERN or LARGE WHITE NAVY.

NUMBER OF PLANTS OR TREES TO THE ACRE AT GIVEN DISTANCES

Dis. Apart	No. Plants	Dis. Apart	No. Plants
12x 1 in.	522,720	36x36 in.	4,480
12x 3 in.	174,240	42x12 in.	12,446
12x12 in.	43,560	42x24 in.	6,223
16x 1 in.	392,040	42x36 in.	4,148
18x 1 in.	348,480	48x12 in.	10,890
18x 3 in.	116,160	48x18 in.	7,790
18x12 in.	29,040	48x24 in.	5,445
18x18 in.	19,360	48x30 in.	4,356
20x 1 in.	313,635	48x36 in.	3,630
20x20 in.	15,681	48x48 in.	2,723
24x 1 in.	261,360	60x36 in.	2,901
24x18 in.	15,520	60x48 in.	2,178
24x24 in.	10,890	60x60 in.	1,743
30x 1 in.	209,088	8x 1 ft.	5,445
30x 6 in.	34,848	8x 3 ft.	1,815
30x12 in.	17,424	8x 8 ft.	680
30x16 in.	13,068	10x 1 ft.	4,356
30x20 in.	10,454	10x 6 ft.	726
30x24 in.	8,712	10x10 ft.	435
30x30 in.	6,970	12x 1 ft.	3,630
36x 3 in.	58,080	12x 5 ft.	736
36x12 in.	14,520	12x12 ft.	302
36x18 in.	9,680	16x 1 ft.	2,722
36x24 in.	7,260	16x16 ft.	170

MEASUREMENT OF AN ACRE

The following will be found useful in arriving at accuracy in estimating the amount of land in different pieces of ground under cultivation: 5 yards wide by 968 yards long contains 1 acre, as do the following measurements: 10 yards wide by 484 yards long; 20 yards wide by 242 yards long; 40 yards wide by 121 yards long; 70 yards wide by 69 yards long; 60 feet wide by 726 feet long; 110 feet wide by 396 feet long; 120 feet wide by 363 feet long; 220 feet wide by 198 feet long; 240 feet wide by 181½ feet long, and 440 feet wide by 99 feet long.

BUSH BEANS—Green Podded Varieties—Cont.

LANDRETH'S STRINGLESS GREEN POD. (52 days). An individual plant selection out of Burpee's Stringless Green Pod. Vine is more erect with darker foliage and larger, slimmer pods which stay greener than the original type. Pods 6 to 8 inches long, round, slightly curved and absolutely stringless.

RED VALENTINE STRINGLESS. (54 days). Plant medium size, erect, very productive. Pods 4 to 5 inches long, medium green, round, curved, slim with crease in back; very fleshy, crisp and tender. Seed purplish red, splashed with pale buff. Except for being stringless, is in all ways similar to the old Red Valentine.

STRINGLESS BLACK VALENTINE. (50 days). This green pod Bean is typically Black Valentine. Has all the sturdy characteristics which popularized Black Valentine as a producer and shipper; has long, practically straight oval pods of good color and texture and is completely stringless. Seed oval, black.

TENDERGREEN. (53 days). Vine medium light, 18-inch bush, upright with good leaf growth. Pods light green, 6-inch average, straight, round, crisp, meaty, stringless and without fiber. Very fine flavor. Seed brown mottled, splashed with buff.

TENNESSEE GREEN POD. (52 days). Vine dark, 12 inches, lazy sprawling growth, large leaves. Pods medium light, 6 to 8 inches, curved, wide, flat, very thin when fit, become knobby with deep indentures between seeds as pod ages; crisp, tender, stringless when young, developing string later. Seed dark brown, medium large, wide, flat.

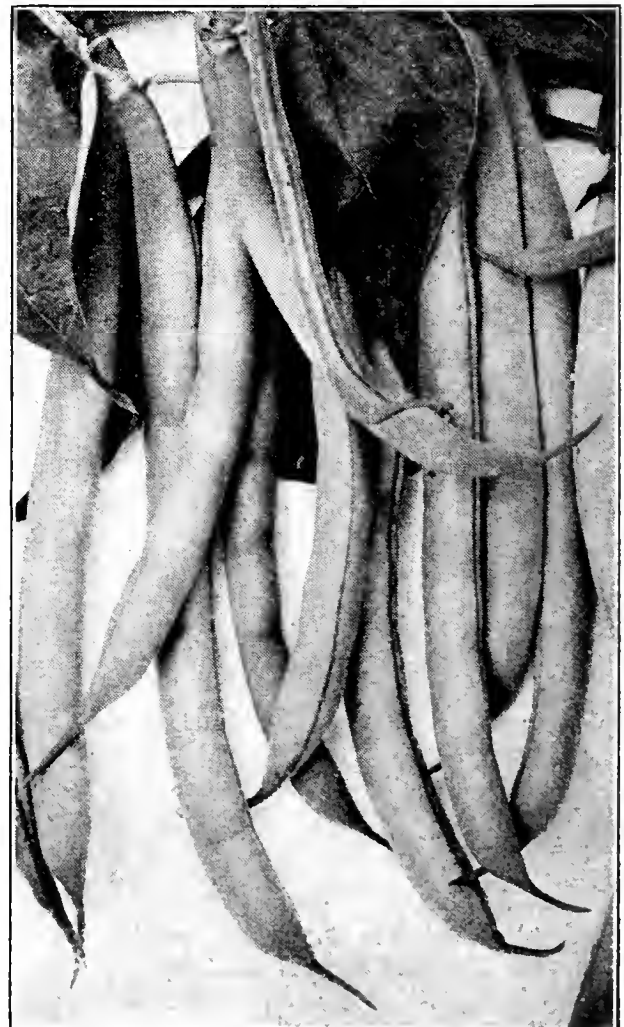
BROAD WINDSOR, BOB or FAVA. The standard English horse Bean.

IMPROVED WHITE KIDNEY. Shell Bean.

RED KIDNEY. Dark red mahogany.

LARGE WHITE MARROW or MOUNTAIN.

ALL BEANS PRICED AT:
Pkt., 10c; ½ lb., 15c; lb., 30c.



Burpee's Stringless Green Pod

Bush Beans

Wax Podded Varieties

WARDWELL'S KIDNEY WAX. (50 days). Hardy and productive. Pods $5\frac{1}{2}$ to 6 inches long, broad, thick, flat and of a delicate waxy yellow. Of excellent quality and with no string in the early growth. Seed white with dark red eye and splashing at end. Very popular with home gardeners in the Chicago area.

PENCIL POD BLACK WAX. (53 days). Plant large, vigorous, upright. Pods golden yellow, 5 to 6 inches long, round, curved; very meaty, stringless and of excellent flavor. Seed black. Excellent for home or market gardeners.

GOLDEN WAX, IMPROVED. (50 days). Vine medium light, 14-inch, strong, sturdy bush with a medium heavy leaf growth. Pods a fine deep waxy yellow color, four inches, straight, wide, thick, flat, stringless, considerable fiber as pod ages, very well flavored. Seed white splashed with mottled red around eye and end of seed.

UNRIVALLED WAX. (52 days). Immensely productive; very early. Pods 5 to $5\frac{1}{2}$ inches long, rather narrow, either perfectly straight or slightly curved, somewhat flattened but fleshy. The pods show their clear yellow color at an early stage and while having a trace of strings are quite fiberless. Plant large, vigorous and nearly disease resistant. Seed distinctly small, flat, kidney-shaped, ochre-brown in color.

WEBBER WAX. Unquestionably one of the best wax-podded Beans ever introduced. It is a market gardener's Bean, having originated in the market gardening section of Chicago. The vine is strong, holding the pods well up. The pods are of an exceedingly bright yellow color, handsomer in this respect than any other Wax Bean, $4\frac{1}{2}$ to 5 inches long, slightly curved and medium thick. Ready for picking in 50 days.

CURRIE'S RUST PROOF WAX. (48 days). Plant dwarf, erect, compact, medium green. Pods flat, $5\frac{1}{2}$ to 6 inches long, waxy yellow, attractive; with strong string, and fibrous, of poor quality. Seed plump, flat, oblong, purplish black.



Webber Wax

DAVIS WHITE WAX STRINGLESS. (52 days). Plant medium large. Pods 6 to $6\frac{1}{2}$ inches, thick, flat, light yellow, straight, uniform and attractive; stringless, fibrous, of fair quality. Seed white, kidney-shaped.

IMPROVED STRINGLESS KIDNEY WAX. (53 days). Resembling Wardwell's Kidney Wax but pod is longer and thicker, not so broad; fairly productive and of high quality; stringless, fiberless, very fleshy and brittle. Pods about 6 inches long and of an attractive, clear yellow color. Seed white with black eye, kidney-shaped.

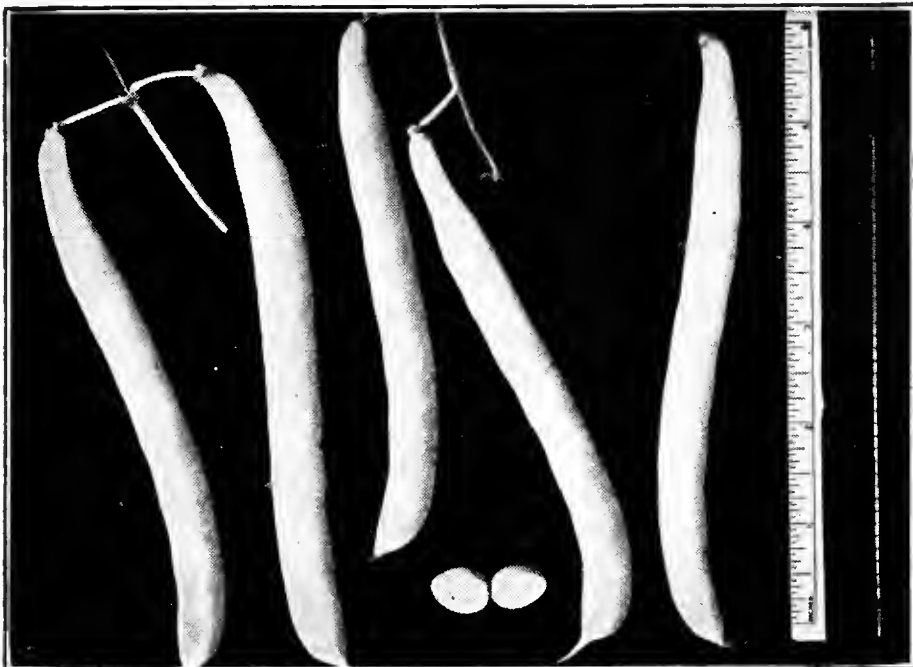
ROUND-PODDED KIDNEY WAX or BRITTLE WAX. (52 days). Plants are of strong growth, spreading and very productive. The leaves are large, broad and roughened. Pods are round, $5\frac{1}{2}$ inches long, slightly curved, light yellow, waxlike, stringless and of the very best quality. Seed white with black eye, kidney-shaped.

ROYAL PURPLE WAX. (48 days). Vine medium dark, 16-inch, thick, heavy bush. Pods bright wax, $4\frac{1}{2}$ inches long, round, curved, stringless at all stages without fiber. Seed light purple, speckled with buff.

SIoux STRINGLESS WAX. (52 days). Vine of strong, upright growth. Pods 6 inches long, of rich cream-yellow color, are meaty, crisp and absolutely stringless. Seed yellowish tan, light speckled.

SURE CROP or BOUNTIFUL WAX. (53 days). A vigorous growing, very productive variety, similar in general appearance of plant and seed to Currie's Rust Proof Wax; the pods, however, are more fleshy, of decidedly better quality and are stringless at practically all stages of growth. Pods about 6 inches long, nearly round, attractive in color and remain a long time in condition for snaps. Seed jet black.

ALL BEANS PRICED AT:
Pkt., 10c; $\frac{1}{2}$ lb., 15c; lb., 30c.



Sure Crop Wax

Enjoy Beans right out of your own garden all summer and early fall by making a planting every two weeks.

Beans - Bush Lima Varieties



Burpee's Bush Lima

Culture. Lima Beans require even more heat than other Beans. They should not be planted until the ground is thoroughly warmed. Bush Limas should be sown on good garden soil in 2- to 3-foot rows, 3 to 6 inches apart, eye down, cover 1 inch if planted in light soils, less in heavy soil. One pound will plant 50 to 60 feet. Pole Limas are more tender than the Bush Limas. Set 6-foot poles 4 feet each way and drop 4 to 6 Beans, eye downward, around each pole, thinning to 3 plants when up.

BURPEE'S BUSH LIMA. (78 days). A thoroughly satisfactory and very popular variety. It is especially suitable for the Chicago area. Plants 18 to 20 inches high, very productive. Pods 4 to 4½ inches long, containing three to four Beans, which are flat and wide and of excellent quality.

BURPEE'S IMPROVED BUSH LIMA. (75 days). Similar to Burpee's Bush Lima, but slightly earlier and longer podded. Plant large, erect, vigorous, very productive; pods contain four to five seeds. Dry Beans, large, plump, flat-oval, surface somewhat wrinkled, color white with greenish tinge.

FORDHOOK BUSH LIMA. (75 days). Vines strong, erect, and true Bush Lima growth. Foliage heavy and very dark green in color. The stalks that produce the blossoms are thrown out from the lateral and main stalks. Pods are large, thick, containing three to five Beans. The most popular market gardener's Lima Bean.

HENDERSON'S BUSH LIMA OR DWARF SIEVA. (66 days). Our stock is the true Henderson's Bush Lima and not the common Baby Lima. Plants bushy, very productive. Pods flat, 3 inches long, containing three to four seeds. Green shelled beans small, flat and of excellent quality.

JACKSON WONDER OR CALICO LIMA. (66 days). Vine dark, 12 inch, thick bush with heavy leaf growth. Pods dark, ¾x3 inches, flat, medium thin. In every way is like the Henderson's Bush except in color of seed. Seed light buff, purple speckled.

MCCREA LIMA. (72 days). Vine dark, thick, upright growth, fairly heavy. Pods dark, thick, flat, slightly curved, containing three to five seeds. Green shelled Beans are thick, medium small, green tinted, potato type, well flavored. Seed dry, medium small, cream-white, thick.

Beans - Pole Lima Varieties

LARGE WHITE LIMA. (88 days). Very productive. A favorite among the Lima Bean growers for the Chicago market. Pods contain 3 to 4 Beans, which are large, white, and flat.

CAROLINA SMALL WHITE LIMA or SIEVA. (76 days). Vines vigorous, with many short branches, so that they are sometimes grown without poles; very early and productive, bearing short pods, which are thin and curved. Seed white, flat.

CARPINTERIA POLE LIMA. (88 days). Vines vigorous, producing an abundance of large, medium green pods 5 to 6 inches long, containing 4 Beans of large size.

KING OF THE GARDEN LIMA. (88 days). The old standard market and family sort. The vines begin to produce pods at the foot of the pole and the bearing season continues until frost. Pods large and well filled with Beans of mammoth size.

FLORIDA BUTTER OR SPECKLED POLE LIMA. (80 days). Vine medium heavy. Pod medium dark, 3 to 3¼ inches long, thin, flat. Green shelled Beans, pale creamy white color, fine flavor. In the Sieva class with a colored seed. Seed cream, purple speckled, medium small.

LEONARD'S IMPROVED FLORIDA BUTTER POLE LIMA. (80 days). A new distinct variety. Pods large, Beans very tender and of excellent quality. Heavy yielders. Seed is more than double the size of Florida Butter, very striking in appearance, creamy white, mottled with purple.

ALL BEANS PRICED AT: Pkt., 10c; ½ lb., 15c; lb., 30c.

Pole Beans are ideal for the home garden where space is limited. All of the better varieties are listed here.
For Pole Beans, see page 5.



Fordhook Bush Lima

Beans - Pole or Running Varieties

Culture. On well enriched soil, set firmly in the ground every 3 or 4 feet each way, poles that are, when set, about 6 feet high. Some time after Bush Beans are planted, plant six or eight Pole Beans one inch deep near the base of each stake and later thin to three or four plants to the pole. Thirty pounds of Pole Beans generously plants an acre and one pound plants one hundred hills. The Pole Bean bears over a longer period than the Bush Bean and is generally considered of superior quality, but it requires more labor, longer time to mature, and is more sensitive to adverse climate and soil conditions.

KENTUCKY WONDER OR OLD HOMESTEAD. (65 days). Vines vigorous, climbing well, and very productive, bearing its pods in large clusters; blossoms white; pods green. Stringless, 8 to 9 inches long; nearly round when young and very crisp, although at maturity they become irregular and spongy. Will give a liberal yield if kept well picked, making it ideal for the home garden. The dry Beans are long, oval, dun-colored.

HORTICULTURAL CRANBERRY. (70 days). Vines moderately vigorous, bearing short, broad, pale green pods, becoming streaked with bright red as they near maturity. Beans large, ovate and splashed with red. Used either green or in the dry state. Very popular in the Chicago district.

DUTCH CASE KNIFE, EARLY. (65 days). Vines moderately vigorous, climbing well, and excellent for a corn hill Bean. Leaves are large, crumpled; pods 6 to 8 inches long, flat, green in color, becoming creamy white later. Beans broad, kidney-shaped and white in color.

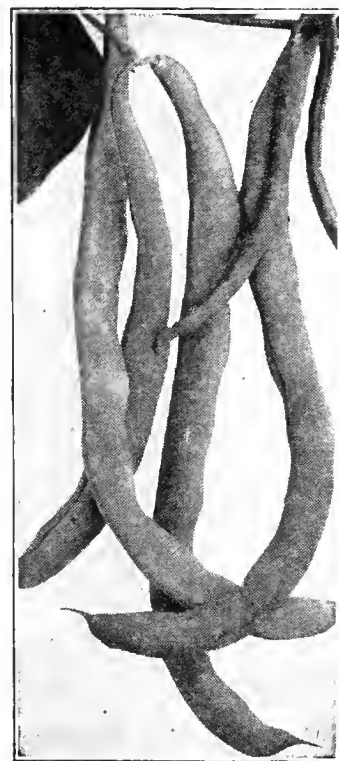
SCARLET RUNNER, FLOWERING. (90 days). Vine very strong growing, dark colored, heavy leaf growth, long runner pole type. Pod dark, 6 inches long, wide, thick, straight, coarse grained at all stages, usable as snaps when very small, excellent green shell. Widely used as a climbing ornamental vine on account of its dazzling purple blossoms. Blossoms freely from midsummer to freezing. Seed dark purple with pinkish purple blotches.

EARLY GOLDEN CLUSTER WAX. (74 days). Plants large with heavy foliage; very productive. Pods 7 to 8 inches long, wide, flat, waxy yellow, very meaty and stringless when young. Seed oval-flat, white.

IDEAL BLACK POLE. (58 days). Earliest and most prolific of the green podded Pole Beans, being a full week earlier than Kentucky Wonder. Pods 5 inches long, round, slightly curved; stringless and borne in clusters of six; very tender, pulpy and excellent in quality. Seeds black.

KENTUCKY WONDER WHITE SEEDED OR BURGER'S STRINGLESS. (64 days). Pods 6 to 7 inches long, round, slender and straight; very tender, fleshy and stringless, of high quality. Color dark green. Seed oval-flat, white.

KENTUCKY WONDER WAX. (68 days). Vine medium dark, heavy growing pole type, heavy leaf



Ideal Black Pole Bean

growth. Pods fine, wax color, 8 inches long, round when young, curved, very meaty, crisp, stringless when young, and without noticeable fiber. As pods age there is a trace of fiber, slight string, and they become somewhat saddle-backed. Very heavy bearer over a long period of time. Seed reddish brown, medium large, oval-flat.

LAZY WIFE. (72 days). Vine medium dark, quite heavy growing pole type, with a fair leaf development. Pods medium light, 6 inches long, broad, flat, straight, stringless, very little fiber, meaty, crisp and well flavored. Good for snaps, green shell and dry shell. Seed white, medium small, nearly round.

McCASLAN'S POLE. (65 days). Vine medium dark, strong growing pole type, with good leaf growth. Pods light, 8 inches long, flat, medium thick, broad, stringless when young, crisp, fiberless and well flavored. Makes a good snap when young, fine green shell and a fair dry shell. Seed white, medium small.

MISSOURI WONDER OR NOXALL. (66 days). Vine medium light, strong growing pole type, with good leaf development. Pod light green, 6 inches long, round, slightly curved, crisp when young, but tough and stringy at all stages. Seed gray, brown speckled, medium small.

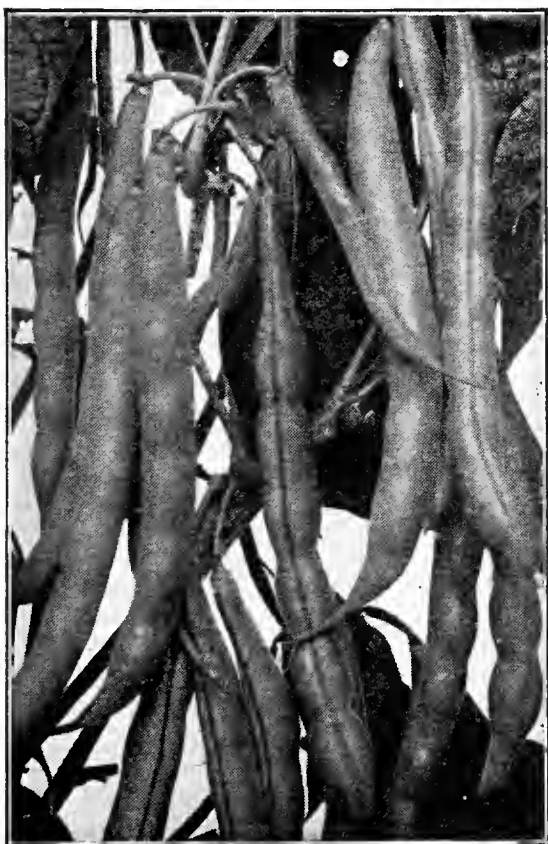
STRIPED CREASEBACK OR SCOTIA. (72 days). A very hardy and productive cornfield Bean. Pods dark green, 6½ to 7 inches long, round, straight and creasebacked; slightly stringy, very fleshy, fine grained, attractive and of good quality. Seed light tan, black striped.

WHITE CREASEBACK. (63 days). An extremely early Pole Bean. Vines small to medium and wonderfully productive, bearing pods in clusters of from 4 to 12 and medium in length. An excellent shipper. Seed small oval, white.

RED SPECKLED CUT SHORT OR CORN HILL. (73 days). A fine variety for planting with corn, 5½ to 6 feet tall; pods 4 inches long, straight, thick, crisp when young. Seed gray, red speckled, small, oval.

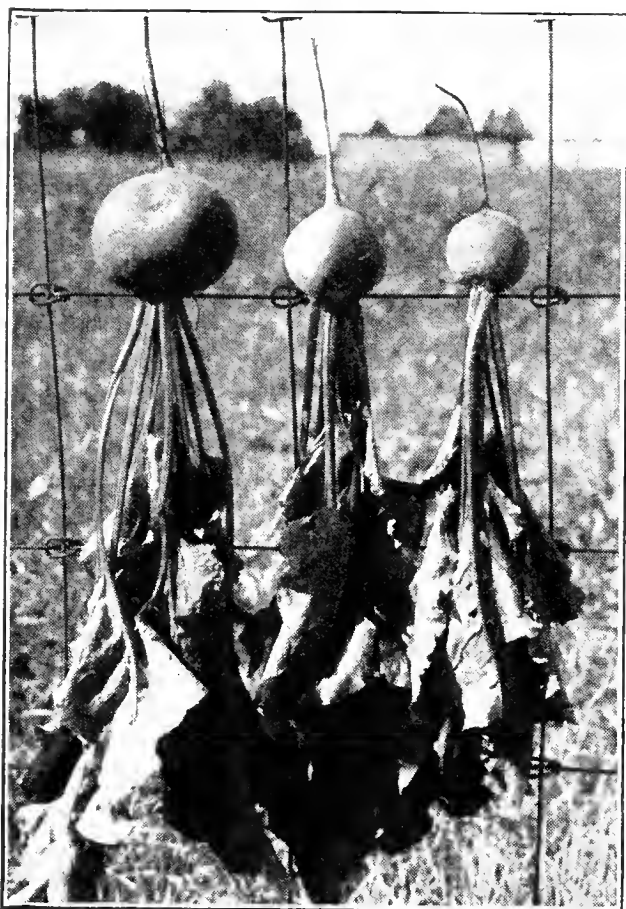
TENNESSEE WONDER. (71 days). Somewhat similar in habit to Kentucky Wonder but with immensely larger, straighter, smoother and more creasebacked green pod. More suitable as a shell than as a snap Bean. Seed slate-gray, black striped.

KING MAMMOTH PODDED HORTICULTURAL or WORCESTER POLE. (75 days). Vine medium dark, heavy growing pole. Pod medium dark, 5 inches long, wide, thick. Largest of the Horticultural family. Pods can be used as snaps if taken soon enough; best as a green shelled Bean. Seed light tan, red speckled, medium large, nearly round.



Kentucky Wonder

ALL BEANS PRICED AT: Pkt., 10c; ½ lb., 15c; lb., 30c.



Detroit Dark Red Ohio Canner Good For All

Beets for the Table

Culture. As soon as the soil can be worked in spring, sow Beet seed in 12- to 18-inch rows for hand cultivation or 18- to 30-inch rows for horse cultivation, dropping 12 seeds to the foot. Cover the Beet seed one-half inch. Later, thin the Beets to 3 to 4 inches apart. Planted April 1st the early varieties should be marketable June 1st or the crop may be advanced several weeks by starting under glass and transplanting to the open, first giving the Beet tops a severe pruning. Use 1 ounce of seed to 75 feet of row and 6 pounds to the acre. Beets sown in early July should be ready to store in pits or in sand in the cellar when freezing weather begins. Number of days are from planting to edible root.

MICHAEL-LEONARD'S DARK RED EGYPTIAN. (50 days). We have worked on this strain for years and feel we have the best stock of Egyptian Beet on the market today. It is dark red, free from light zones, early and an excellent Beet in every way. Try some in your garden this year. It is sure to please as this strain was especially developed for the Chicago area.

EGYPTIAN, CROSBY'S. (50 days). An extra early variety especially adapted for the market gardener and home garden. Roots average 3 inches, of dark red color and almost globular; flesh distinct vermilion, which it retains in cooking. Tops medium.

EGYPTIAN, EARLY FLAT. (48 days). Large, upright, dark red leaves with green tint. Roots a very deep, dark red, flat, thick, sometimes inclined to be rough and irregularly shaped. Usually clean and free from fiber roots. A small tap root. Cut flesh shows a very deep dark color with very faint zoning of slightly lighter red.

DETROIT DARK RED. (50 days). Long experience has shown this variety to be the best deep Red Turnip Beet not only for market gardeners but for home use. It is also one of the best for canning, making a strikingly handsome product, much superior to that obtained from other varieties. Tops small, upright growing so that the rows may be close together; leaf stems and veins dark red, blade green; roots very crisp; tender and sweet and remaining so for a long time. We believe that our stock of this variety will produce a crop more uniform in shape, color and quality than any other.

EARLY WONDER. (55 days). A selection from Crosby's Egyptian. Roots very uniform, nearly globe-shaped with small top and tap root; skin dark red, flesh deep blood-red with little zoning. Popular with market gardeners for early or late planting.

EARLY ECLIPSE. (55 days). An early variety used by both market gardeners and home gardeners. Tops small; roots 2 to 3 inches long, bright red; shape globular.

BLOOD TURNIP, EARLY IMPROVED. (60 days). An extra selected stock of blood Turnip having larger, coarser tops and roots than the Detroit Dark Red and requiring a considerably longer time to mature. Excellent for summer and autumn use.

CRIMSON GLOBE, EARLY. (58 days). Tops medium large, nearly all red with a slim upright leaf development. Roots dark red, nearly a perfect globe, usually smooth and clear of side roots. Flesh dark red, faintly zoned with purplish white.

GOOD FOR ALL. (55 days). An excellent variety developed from Detroit Dark Red. Especially fine for canning and pickling whole at 1¼ to 1½ inches in diameter. Roots smooth, even size and shape and almost globular; collar and tap roots very small; interior deep crimson, free from white zones.

LONG SMOOTH DARK BLOOD. (78 days). The standard long, late sort. Roots 8 to 10 inches long, very dark, blood-red flesh; quality fine.

ALL BEETS PRICED AT: Pkt., 10c; oz., 15c; ¼ lb., 30c.

Swiss Chard

FORDHOOK GIANT OR DARK GREEN WHITE RIB. (55 days). Very broad, thick, heavy, short white stem and a large, broad, thick, very much crumpled and savoyed spear-shaped leaf, growing 26 to 28 inches tall. Leaves very glossy and waxy looking; upright growth. Best of all the Chards; leaves make the most tender of greens and the broad white stems used as asparagus are excellent.

LUCULLUS. (55 days). An improved type of Chard. Of more upright growth than the Silver variety; leaves yellowish green, much crumpled and curled, mid-rib and veins white, stalks thick, broad and flat and as large as rhubarb.

PRICES: Pkt., 10c; oz., 15c; ¼ lb., 25c.



Dark Green
Swiss Chard

Mangel-Wurzel

Culture. Plow deep for this crop, and in May or June plant six Mangel seed to the foot in two or three rows, later thinning to a 9-inch stand. One ounce sows one hundred feet of row and six pounds an acre. When a light frost has occurred, lift the roots and store in pits or cellars.

IMPROVED MAMMOTH LONG RED. (108 days). The largest and most productive Mangel. Roots 5 inches thick, 15 inches long, tapering to a point. Grows half above the ground. Color light red.

GOLDEN TANKARD. (100 days). Shape cylindrical, color deep rich yellow; flesh yellow circled with white. Unequaled for feeding stock.

PRICES: Pkt., 10c; $\frac{1}{4}$ lb., 20c.

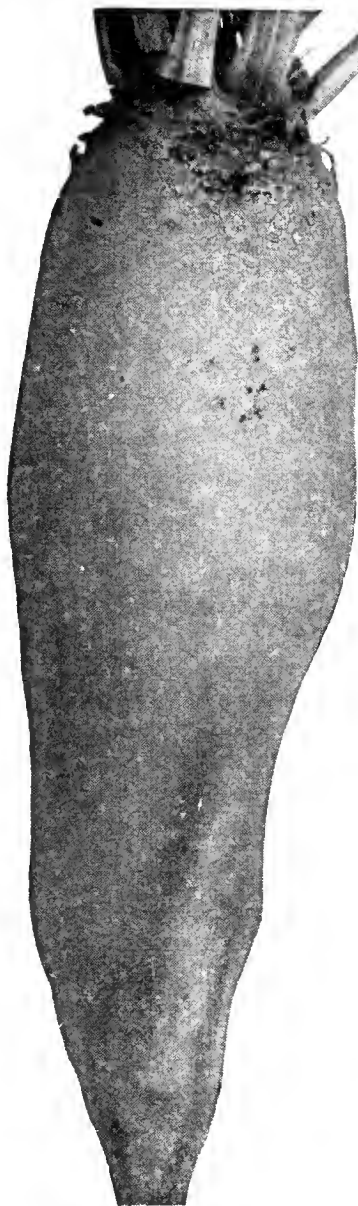
Sugar Beets

Culture. In growing, the Sugar Beet is treated like the mangel except that only six or eight inches of space is given each Beet in the row.

GIANT FEEDING HALF SUGAR - For Feeding. (90 days). This unites the large size of the mangel with the greater feeding value of the Sugar Beet. The roots average 10 to 12 inches and the outline is that of a broad, thick wedge, the upper portion of a soft bright pink, shading lighter toward the bottom where the lower portion for about one-third the length is white.

KLEIN WANZLEBEN - For Sugar. (90 days). The variety most used for sugar manufacture on account of high sugar content; is also good for stock feeding. Roots long with thick shoulder, tapered; skin gray-white, flesh solid white.

PRICES: Pkt., 10c; $\frac{1}{4}$ lb., 20c.



Mangel-Wurzel
Improved Mammoth Long Red

Broccoli

GREEN ITALIAN SPROUTING. (60 days). A distinct variety of the sprouting type. It forms a large head consisting of a cluster of bluish-green flower heads. When this central head is removed the plant develops numerous lateral sprouts, each of which produces a small head. These are cut, leaving about 6 in. of the stem, and are tied in bunches for market. Both stems and heads are cooked and served like cauliflower.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Brussels Sprouts

Culture. One of the most delicious garden vegetables. Plant in 3-foot rows, $1\frac{1}{2}$ to 2 feet apart. One ounce will produce about 5000 plants. Cultivate same as cabbage. Autumn grown Sprouts, drilled in May and transplanted in July generally do the best as the plants are quite hardy and the buds mellow under frost.

DWARF IMPROVED. (75 days). Grows 18 to 30 inches high, producing compact sprouts 1 to 2 inches in diameter; grayish green in color. Hardy, early. **Pkt., 10c; oz., 25c.**

Cabbage

Culture. Cabbage plants, when properly hardened by gradually being brought to a low temperature and the quantity of water in them diminished, will stand any frost and some considerable freezing. Yet, a Cabbage plant raised at a high temperature and full of water will be killed by even a light frost. Cabbage can be grown by planting the seed heavily where the crop is to grow and thinning the plants, but a better practice is to raise the plants without crowding in a seed bed which is not richer than the fields

to which the plants go. Transplant, if possible, on a cloudy day, watering the plants if the soil is dry. For early Cabbage, sow seed in hotbeds in February, transplant to cold frames in March and set outside in April, or sow seed out-of-doors as soon as the soil can be worked in spring, covering the seed one-third inch deep. All vegetable plants are best when grown without check, so let as much soil adhere to the roots of the plant in transplanting as will hold and set up to the first leaf. At this time the plants should have 4 or 5 pairs of leaves and be 4 to 6 inches high. Set small varieties to be worked by hand as close as 18 inches, while large, late varieties, horse-cultivated, need 30 or more inches. If heads are so early as to begin bursting, push the head to one side far enough to tear off the roots on one side. Cabbage grows successfully on a wide variety of soils and experience points to liming, deep plowing, and heavy manuring as successful practices. The number of days given is the time required from setting plants to mature heads.

GOLDEN ACRE. (65 days). A selection from the earliest strain of Copenhagen Market. It is a few days earlier, is a somewhat smaller plant and has a slightly smaller head than the Copenhagen Market. Very solid, fine grained and exceptionally well flavored. It is the best of the first early round heads for early market and shipping use. Sure heading and easy to grow.

BUGNER'S. (120 days). A winter Cabbage which has been and still is the most popular late variety around Chicago. It makes very large, somewhat flattened heads which are extra hard and solid. This variety is, furthermore, greatly resistant to "yellows" disease.



Golden Acre

Cabbage—Continued

GLORY OF ENKHUIZEN. (80 days). This is an excellent midsummer variety. Makes a nice large head, has few outer leaves and can be planted close. Very popular with kraut packers and market gardeners.

EARLY JERSEY WAKEFIELD. (64 days). One of the most popular extra early varieties. The plants are compact, erect, with few outer leaves, and withstand cold and unfavorable weather well, as they are very hardy. Heads medium size, cone-shaped and solid. Our stock has been very carefully selected.

RED ROCK MAMMOTH. (105 days). The largest heading of any red sort. Heads are hard, of deep red color, quality excellent.

COPENHAGEN MARKET. (65 days) One of the finest early round-headed Cabbages in cultivation. The heads average about four pounds each in weight, are hard and solid with small core. The quality is extra fine and sweet. It is a short stemmed variety, the heads nearly resting on the ground. The leaves are light green, rather small, saucer-shaped and tightly folded, making it possible to set them close together in the field.

IMPROVED AMERICAN SAVOY. (87 days). Closely approaching the cauliflower in delicacy and delicious flavor. The best of all Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid—a sure header.

Other Standard Varieties

LARGE OR CHARLESTON WAKEFIELD. (72 days).

EARLY WINNIGSTADT. (80 days).

ALL SEASONS. (88 days).

EARLY DWARF FLAT DUTCH. (70 days).

EARLY DRUMHEAD. (83 days).

SUREHEAD. (100 days).

LARGE LATE DRUMHEAD. (110 days).

PREMIUM LATE FLAT DUTCH. (102 days).

HOLLAND SHORT STEM. (110 days).

DRUMHEAD SAVOY. (89 days).

PENN STATE BALLHEAD. (110 days).

RED DUTCH. (110 days).



Premium Late Flat Dutch

CHINESE CABBAGE, CHIHILI. (75 days). Earliest and most sure heading of the Chinese varieties. Plant of upright growth, producing long, solid, white cylindrical heads, 3 to 4 inches thick, 18 to 20 inches in length. Leaves very broad, smooth, fringed on edge, with broad, white mid-rib. Superior quality.

ALL CABBAGE (except Yellows-Resistant) PRICED AT: Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 75c.

Yellows-Resistant Varieties

We wish particularly to call your attention to our Yellows-Resistant strains of Cabbage seed.

Our stock seed is raised from heads grown on heavily infested yellows-sick soil and selected rigidly and continuously for type and resistance. We offer only FIRST GENERATION seed from such stock.

PRICES OF YELLOWS-RESISTANT CABBAGE:
Pkt., 10c; oz., 60c.

ALL HEAD EARLY YELLOWS-RESISTANT. (82 days).

ALL SEASONS YELLOWS-RESISTANT. (92 days).

GLOBE or GLORY OF ENKHUIZEN YELLOWS-RESISTANT. (80 days).

GOLDEN ACRE YELLOWS-RESISTANT. (68 days).

JERSEY QUEEN, RESISTANT WAKEFIELD. (65 days).

MARION MARKET or COPENHAGEN MARKET YELLOWS-RESISTANT. (75 days).

RED HOLLAND YELLOWS-RESISTANT. (100 days).

WISCONSIN NO. 8 YELLOWS-RESISTANT. (110 days).



Copenhagen Market

Carrots for the Table

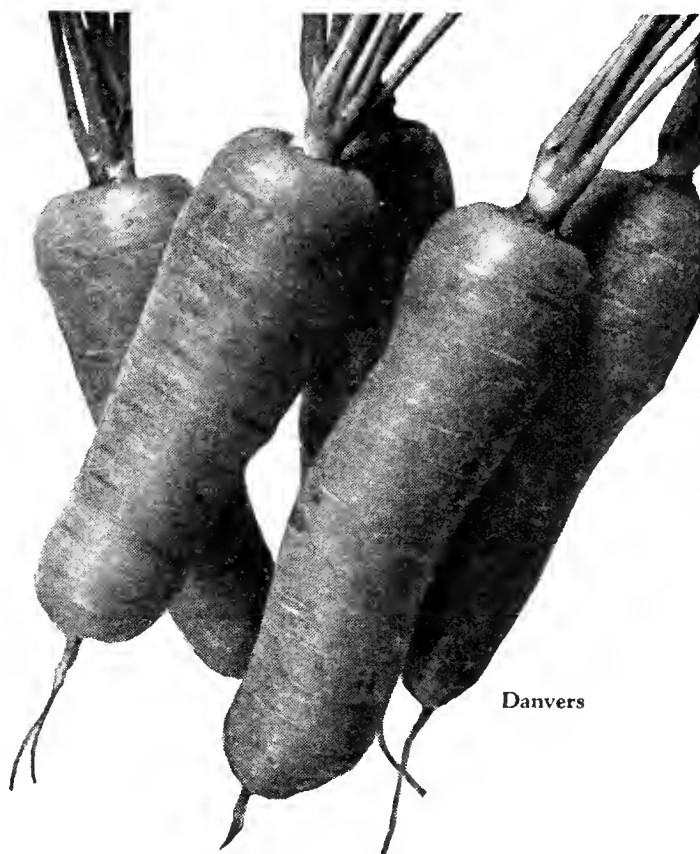
CALIFORNIA PEERLESS. (70 days). This Carrot is of outstanding quality, very smooth and of medium size with very small core and does not make very much top. The color is a bright red. It will stay in bunching condition for a long while and is a fine Carrot to pack and sell in boxes. The crown is oval in shape and the tops do not break off as in other Carrots.

CHANTENAY. (70 days). Tops medium sized; necks small; roots tapering slightly but uniformly stump rooted and smooth; color deep orange-red; flesh very crisp and tender. A heavy cropper and is undoubtedly one of the best for both the market and private garden while its great productiveness makes it very desirable as a field sort.

RED-CORED CHANTENAY. (70 days). An outstanding favorite with many people who grow Carrots in their gardens. The rich deep reddish orange color extends clear to the center. The root tapers to a blunt end.

LONG or GREATER CHANTENAY. (70 days). This is a strain of Early Chantenay which resembles the original type in all respects except that it averages $1\frac{1}{2}$ to 2 inches longer.

DANVERS. (73 days). Grown largely on account of its great productiveness and adaptability to all classes of soil. Tops of medium size, coarsely divided. The smooth and handsome roots are deep orange, of medium length, tapering uniformly to a blunt point; flesh sweet, crisp, tender, and of a deep orange color.



OXHEART or GUERANDE. (72 days). Tops small for the size of the roots, which are comparatively short, but often reach a diameter of 5 inches, terminating abruptly in a small tap root. Flesh bright orange, fine grained and sweet. This variety is especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. When young, excellent for table use, and when mature equally good for stock.

EARLY SCARLET or SHORT HORN. (67 days). Excellent for early planting out-of-doors. Tops small, coarsely divided; roots top-shaped but tapering abruptly to a small tap; skin orange-red.

IMPERATOR. (77 days). Tops medium but strong enough for good bunching. Roots 7 to 8 inches long, have sloping shoulders, are smooth, deep rich orange, tapering to a semi-blunt end. Flesh rich orange color, extending to center of root with indistinct core; fine grained, tender and of fine quality. An excellent variety for market garden and shipping.

IMPROVED LONG ORANGE. (88 days). A heavy cropping sort for garden use, and for stock. Roots tapered to a point; red-orange. Flesh similar in color to exterior, with core of lighter shade.

MORSE'S BUNCHING. (77 days). Tops short; foliage rather coarsely cut and stems medium size and strong. Roots at maturity are $1\frac{1}{4}$ to $1\frac{1}{2}$ by 8 inches in size, almost cylindrical, with rounded shoulders, and are well stumped.

NANTES HALF LONG or CORELESS. (70 days). Tops of medium size, roots cylindrical, smooth, bright orange; flesh orange, becoming yellow in center but with no distinct core. Excellent for the market or home garden.

ALL CARROTS PRICED AT:

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.



Culture. The Carrot, whether used raw, fried, boiled or stewed, used alone or combined with other vegetables or meat is not surpassed in nutritious healthfulness by any vegetable. Plant Carrot seed from the time the soil can be worked in the spring till July, in 1- or 2-foot rows for hand cultivation or in 30-inch rows where a horse-drawn tool is used. Use 1 ounce of seed to 100 feet of row, 3 to 4 pounds to the acre, covering one-half inch deep and later thin to a 4-inch stand. To cultivate the rows at an early date, sow Radish seed, which germinates quickly, with Carrot seed, which germinates slowly. Do not overlook the value of this crop as a stock feed. Number of days are from planting to roots of bunching size.

Carrots for Stock Feeding

IMPROVED SHORT WHITE or MASTODON. (90 days). Late, heavy cropper; one of the best for stock. Roots 7 to 8 inches long, 3 inches thick at the top; tapered, pointed; easily harvested.

LARGE ORANGE BELGIAN. (90 days). Grows a third or more above the surface. Roots will average 2 inches in diameter at the shoulder and a foot or more in length. Are easily pulled in harvesting and do not have to be dug out like most long-rooted sorts. Flesh and skin pale orange.

STOCK CARROTS PRICED AT:

Pkt., 10c; $\frac{1}{4}$ lb., 25c.

Cauliflower

EARLY SNOWBALL. (55 days). Plants dwarf, with short, pale green leaves. Heads medium, firm, compact, solid, pure white, and of finest quality; a dependable header. Well adapted to shipping.

CHICAGO SNOWBALL. (57 days). For early fall crop this variety is without equal. Plant in open ground in April and transplant in June; crop will then mature in September, making excellent solid, large white heads. As its name indicates, this variety was developed for the finest possible results in the Chicago area.

SUPER-SNOWBALL. (56 days). A highly desirable main crop variety, also used for early planting. Starts heading early and uniformly. Heads medium large, compact, very white.

DANISH DRY WEATHER. (66 days.) Produces solid, pure white heads considerably larger than Early Snowball, but it is a week later. This variety is especially adapted for growing in dry sections where nearly all other varieties fail to make good heads, but does equally well in all weather.

ALL CAULIFLOWER PRICED AT:
25c per pkt.

Culture. For very early Cauliflower sow in hotbed in January or February; transplant to flats or cold frames and set out as soon as the ground is warm in the spring, setting 2 or $2\frac{1}{2}$ feet apart each way. One ounce grows 2500 plants and 4 to 6 ounces plant an acre. Cauliflower cannot be expected to mature satisfactorily in hot, dry weather, so must have plenty of water especially when the plants are heading. When the head appears, tie the outer leaves over the head or pin these leaves with wood pins or beef skewers so the leaves will shade and blanch the head and then cut the head before it starts to branch. Remember that all enemies of cabbage emphatically attack Cauliflower, and are to be combated in a like manner. For early fall and late Cauliflower, plant in open ground in April, transplanting in June, giving same cultivation you would cabbage. The number of days given is the time required from setting plants to mature heads.

**Plant More Onion Sets
This Year
They are Very
Reasonable in Price**

Chicory

WITLOOF or FRENCH ENDIVE. Grown for its use as a salad, the blanched head resembling Cos Lettuce in appearance. The seed planted in the late spring gives parsnip-like roots by late autumn. The roots are then placed in earth where there is some heat, as in the greenhouse, boiler room, or a warm cellar. The root then throws out the blanched salad head. **Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.**

Collards

TRUE GEORGIA or SOUTHERN. (80 days). Plant 2 to 3 feet high, forming a cluster of tender, undulated leaves at the top of its rather long stem; used as "greens" in the South and West.

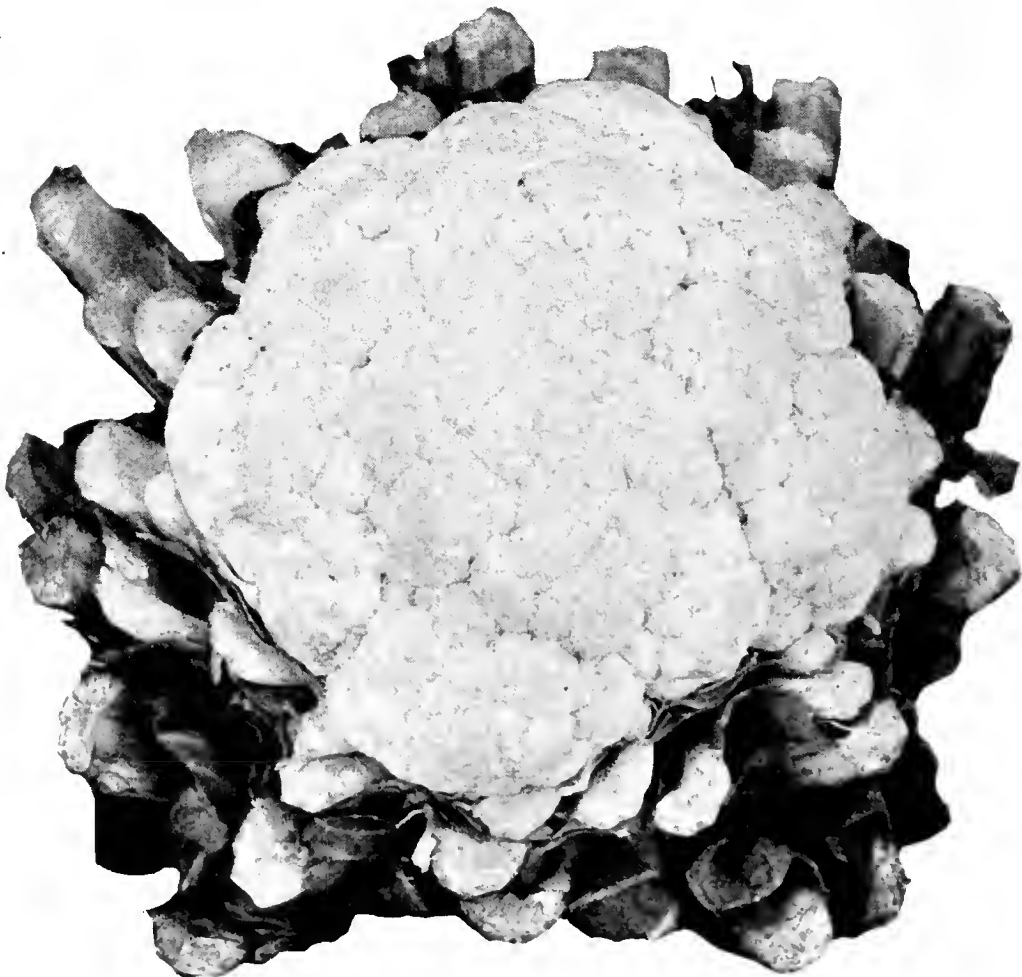
BUNCOMBE or CABBAGE. A cross between Georgia Collards and Charleston Wakefield Cabbage, bred for the easy growth and hardness of the Collard and the flavor and heading qualities of the Cabbage. It does not winter-kill with ice and snow and stands hot weather as well. Heads are rounded, not as firm as Cabbage but of delicious flavor.

PRICE: Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Cress

CURLED or PEPPER GRASS. A small plant with frilled or curled leaves which are well liked when young for garnishing and for giving a warm pungent taste to lettuce. It grows best in cool weather and moist soil. **Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.**

TRUE WATER. A distinct variety of Cress with small, oval leaves. It thrives best when its roots and stems are submerged in water, although a fair growth may be obtained in soil which is kept wet. The seed is usually sown and lightly covered in gravelly, mucky lands along the borders of small, rapid streams. **Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.**



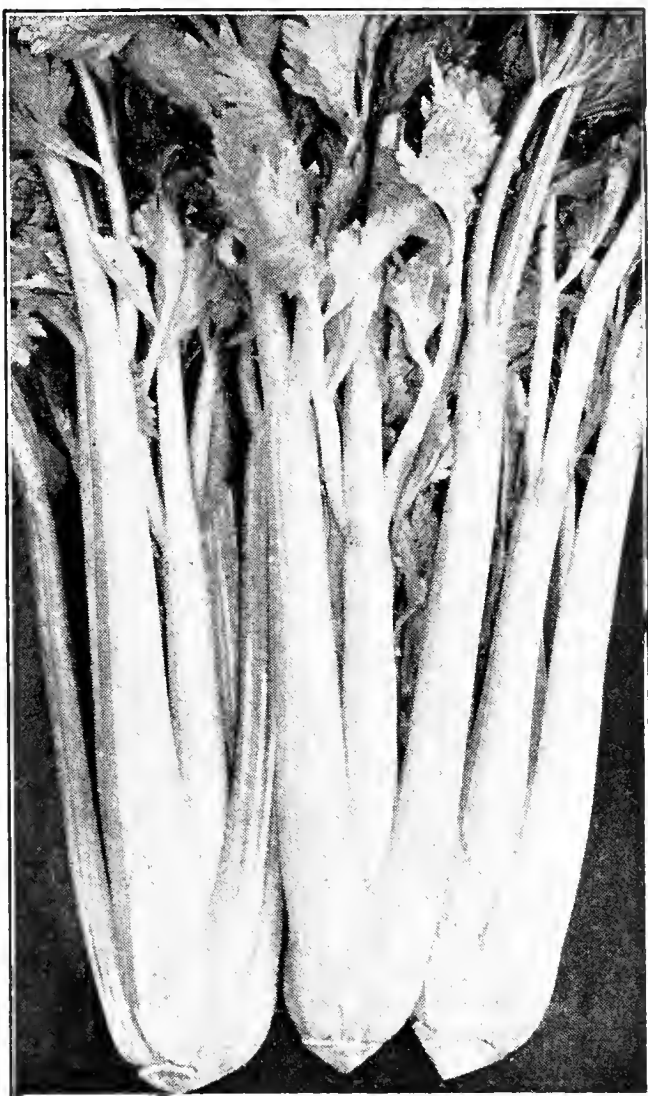
Cauliflower, Chicago Market

Celery

Culture. Press celery seed into the ground; do not try to cover it and when seed is kept wet and not above 60 degrees Fahrenheit, germination occurs in 10 to 20 days. Celery needs 4 to 5 months from seed to use so very early Celery should be started in hotbeds after January and when 2 inches high, transplanted or thinned to a space of 2 inches. Later trim the tops to produce stocky plants and when 5 inches high set where plants are to mature, first trimming off one-third of the roots and leaves. Celery seed may be planted out-of-doors in April and treated as outlined above. Given sufficient water, celery can be grown on any good garden soil and 1 ounce of seed gives about 6,000 plants. When almost grown, Celery must be blanched by the use of boards, earth, paper or other covering. If boards are used, rows can be set as close as 30 inches; if earth blanched, 48 inches or more is better. Set plants 6 inches apart in the row and press the soil firmly about the roots. With a few stalks in a garden, a tile set over the plant or a wrapping of paper answers the purpose. If earth is used in blanching it should be drawn about the plant to one-third its height and repeated twice a few days apart till leaves only are exposed. Do not cultivate, hill or disturb Celery when damp or rust may occur. In hilling with earth, place a peg at end of row with string to it and pass string about each plant so as to prevent earth from falling into the heart. To store, celery should be only partly blanched. Celery matures best in cool, moist weather, so the grower farther South may delay this planting calendar to fit his own market and convenience. Number of days are from sowing seed to edible stage.

WHITE PLUME SELF-BLANCHING. (110 days). This is the earliest and most easily blanched. The plants grow rapidly and blanch easily during the summer months. Later in the fall the central stalks and leaves are of pure snowy whiteness even without earthing up. Does well in the home garden, since it requires little special care. Pkt., 10c; oz., 50c.

GOLDEN SELF-BLANCHING, ORIGINAL STRAIN, SELECTED. (120 days). The original strain has a greenish tinted outer leaf and a yellow inner leaf, leaves are medium heavy with a fairly strong rib; grows 15 to 16 inches tall and is fairly compact in growth. Stalk is medium large, solid, very crisp, without fiber, and blanches to a medium deep yellow. It is most excellent for early market and shipping. Has a very fine flavor. Pkt., 10c; oz., \$1.25.



White Plume

GOLDEN SELF-BLANCHING, NEW TALL TYPE. (120 days). Like the original type but has a slightly slimmer stalk and is 2 inches taller. Looks better when tied in bunches and packs better for shipping. Pkt., 10c; oz., \$1.25.

GIANT PASCAL. (135 days). This is a green leaved variety and an excellent sort for fall and winter use. It blanches to a beautiful yellowish white color, is very solid and crisp and of a fine, nutty flavor. Pkt., 10c; oz., 50c.

FORDHOOK or EMPEROR. (125 days). Leaf (outer) dark green, (inner) yellowish green, medium large and quite thick, average 18 inches tall. Stalk large and thick, heavy, tender, crisp, very little fiber; blanches to a pale gold heart. Good garden and local market type. A fair winter keeper. Pkt., 10c; oz., 50c.

WINTER QUEEN. (120 days). A medium dwarf, winter variety, slightly earlier than Giant Pascal. Stalks light green, broad, solid and crisp; blanches well to creamy white. Pkt., 10c; oz., 50c.

WONDERFUL or GOLDEN PLUME. (115 days). A selection made from the old type of Golden Self-Blanching for a much larger heart or stalk; is a few days earlier. Has all the good points of its parent plus increased size and earliness. Pkt., 10c; oz., 50c.

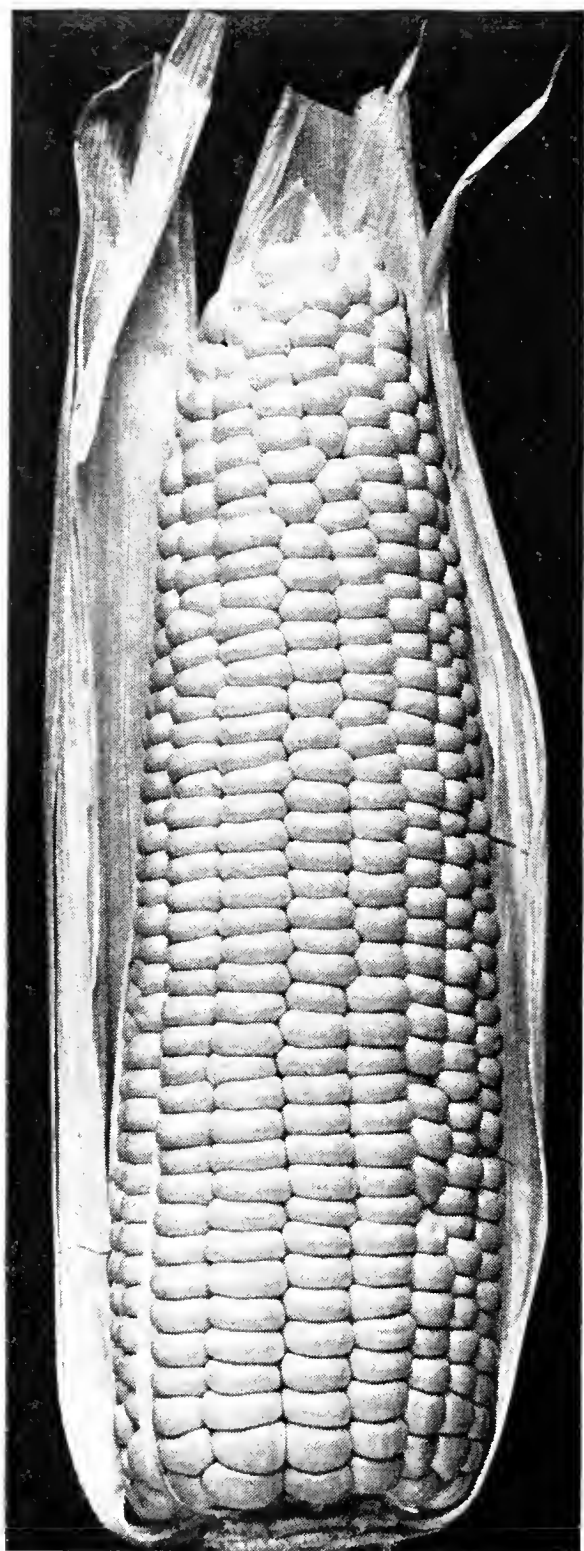


Golden Self Blanching

Celeriac

LARGE SMOOTH PRAGUE. (120 days). Grows 12 to 14 inches tall. Roots are tapered in shape, 2 by 5 inches; usually show considerable side roots. Flesh is pure white. Used as celery flavoring for soups. This is the most commonly used strain. Pkt., 10c; oz., 30c; ¼ lb., 75c.

SWEET



Michael-Leonard's Golden Hummer

Culture. Do not plant Corn in cold ground as the seed is liable to rot. About the middle of May, plant corn in hills 3 to 4 feet each way, dropping 8 to 10 seeds to a hill, later thinning to 3 stalks; or plant in 3- or 4-foot rows, dropping 3 or 4 seeds to the foot, later thinning to stand 1 foot apart in the rows. Seed should be covered $\frac{1}{2}$ inch on heavy soil to 1 inch on light, sandy soil. One pound will plant 100 hills or 200 feet of row and 7 to 10 pounds plant an acre. Plant every 2 weeks up to July 15th for a continuous supply. Number of days are from sowing seed to roasting ear stage.

ALL CORN
(except Hybrid varieties)

PRICED AT:

Pkt., 10c; $\frac{1}{2}$ lb., 15c;
lb., 30c.

GOLDEN BANTAM. (78 days). The most popular and finest flavored yellow Sweet Corn. Stalks 4 to 5 feet high; ears 6 to 7 inches long with 8 rows; kernels broad, sweet, very tender. Our stock of this important variety is unexcelled.

IMPROVED GOLDEN BANTAM. (82 days). A yellow variety good for home garden and canning. Ears large, 6 to $6\frac{1}{2}$ inches long with 10 to 14 rows; kernels medium, tender and of good flavor.

BARDEN'S WONDER BANTAM. (74 days). Stalk 5 to 6 feet tall, slender, medium dark colored with a fairly heavy, low leaf growth, spare at the top; ears 8 to 10 inches long, slender, white, 8 to 10 rows of broad, medium deep, thick, rich yellow kernels with typical bantam color and appearance but not so well flavored although it seems to be as sweet. Very popular market and home variety in the Chicago area.

BANTAM EVERGREEN. (85 days). A cross between Golden Bantam and Stowell's Evergreen. Ears 8 inches long, 12- to 14-rowed; grain rather broad and deep of a rich golden yellow color. One of the best canners' varieties.

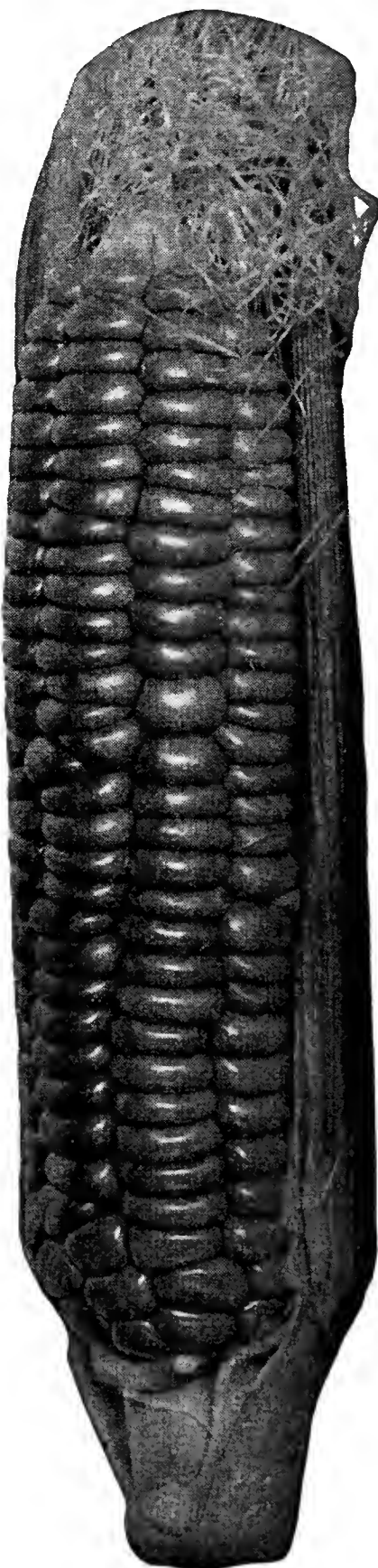
WHIPPLE'S EARLY YELLOW. (81 days). A remarkable yellow Sweet Corn of much merit. While the stalks grow 6 feet or more in height and the 10- to 14-rowed ears are 7 to 8 inches in length, this variety matures only 3 days later than Golden Bantam. The kernels are broad, deep and of excellent quality.

WHIPPLE'S EARLY WHITE. (87 days). An excellent mid-season variety with deep kernel, desirable for home and market garden. Stalk, $5\frac{1}{2}$ to 7 feet, strong and erect, commonly bearing 2 ears, 7 to 8 inches long, 14- to 18-rowed, well filled at tips; kernels deep, medium narrow, pure white, sweet and tender.

MICHAEL-LEONARD'S GOLDEN HUMMER. (60 days). The largest and earliest of the Yellow Sweet Corns and one of the best for market gardeners as well as home gardeners. Ears $6\frac{1}{2}$ to 7 inches, 12-rowed; kernel golden yellow, medium deep, broad and of excellent flavor.

LEONARD'S EARLY. (60 days). The stalks are short and stocky, usually producing 2 large, handsome, 12-rowed ears on each stalk. The Corn is a beautiful, waxy white of wonderful, sweet flavor and is ready for market so much ahead of the other early varieties that it brings a high price.

BLACK MEXICAN. (85 days). Popular for home and market garden use. Ears 7 to $7\frac{1}{2}$ inches, 8-rowed; kernels tender, very sweet, white at eating stage, changing to blue-black at maturity.



Golden Bantam

CORN

COUNTRY GENTLEMAN. (90 days). Seed small, round, slim, pointed, shoe-peg type; stalk 7 feet, medium heavy with a fairly heavy leaf growth uniformly up the stalk, quite dark green; ears 7 to 8 inches, tapered; small, white kernels (not in rows) very closely packed, very deep, slim, round top, pure white, very sweet and well flavored. Ears normally 24 to 30 inches from the ground; on good soil double eared stalks are the rule instead of the exception; a very heavy cropper on most any good soil.

STOWELL'S EVERGREEN. (94 days). Standard main crop variety. Excels in sweetness and productivity. Popular for canning, marketing and the home garden. Stalks 7 to 8 feet; ears 14 to 18-rowed, 7 to 9 inches long.

NARROW GRAIN EVERGREEN. (92 days). The ear is as large as the Stowell's Evergreen and averages 20 to 24 rows to the ear. The cob is small in comparison to the size of the ear, and the kernels are very long, narrow and remarkably free from starch. The rows are uniformly straight and the ear holds its evenness from butt to tip more uniformly than any other type of Evergreen.

SMALL COB EVERGREEN. (95 days). Stalk 8½ feet with fairly heavy, very strong, even leaf growth, the leaf being long and broad like field corn; ears 8 inches, very slender, with a very small cob, generally 8 rows with medium deep, medium broad, pure white kernels, very sweet and tender. Has a very heavy, long, close husk. Holds for weeks after becoming fit to eat.

EARLY EVERGREEN. (83 days). The ears of this corn grow 8 inches long, are mostly 14 to 18-rowed; a magnificent kind for market gardeners and for main crop in home garden. Ripens 10 days before Stowell's Evergreen.

ADAMS' EARLY. (82 days). Stalk 6 to 7 feet tall, rather heavy, with a good leaf growth, leaves dark and medium large; ears 7 to 8 inches long, slender, white, 12 to 14 rows of white, smooth, medium deep, medium broad kernels. Fairly tender and well flavored. Not a true Sweet Corn but used in the South for roasting ears.

GOLDEN GIANT. (82 days). A second early variety, producing ears 7 to 8 inches long, 14-rowed; kernels golden yellow, medium in size and of fair quality.

GOLDEN GIANT. (82 days). A second early variety, producing ears 7 to 8 inches long, 14-rowed; kernels golden yellow, medium in size and of fair quality.

GOLDEN SUNSHINE. (70 days). An early variety of Golden Bantam type. Stalks 4½ to 5 feet high; ears 10 to 12-rowed, 6½ to 7 inches long; kernels large, broad, golden yellow and of good flavor.

HOWLING MOB. (85 days). One of the finest second early, large eared sorts, very productive, white and of excellent quality. Ears 7 to 9 inches long, 12 to 14-rowed.

TRUCKER'S FAVORITE. (78 days). A favorite with shippers in the South. The ears are 8 to 10 inches long, 14 to 16-rowed, usually two to the stalk; kernels white, deep, sweet and exceptionally tender.

Hybrid Sweet Corn

TENDERGOLD. (72 days). A very fine Corn of outstanding quality introduced by us after years of research. Four days earlier than Golden Bantam and generally twice as productive, the attractive 8-inch, 12-rowed ears commanding a premium on the market. For tenderness and succulence we have never seen its equal, and it holds this fine quality 2 to 3 days longer than other Corns.

HYBRID EARLY EVERGREEN. (85 days). Like the open pollinated in all respects plus far greater uniformity in stalk and leaf type and a far more uniform ear type.



Golden Cross

GOLDEN CROSS BANTAM. (84 days). A bright yellow, 12-rowed corn with 8-inch ears borne well up on a sturdy stalk. The quality is fully equal to Golden Bantam in every way, matures 6 days later and is 2 to 3 times as productive. In addition, this corn is very resistant to the bacterial wilt known as Stewart's Disease, which often causes failure with other early yellow Sweet Corns. We cannot recommend this Corn too highly for canners and table use.

MICHAEL-LEONARD SOO-BRED. (78 days). Award of Merit 1935 All-America Seed Trials. This is the first year we have been able to produce enough of this outstanding Corn to offer it in limited quantity to our own trade and we are sure you will be as enthusiastic about it as we are. The 9 to 10-inch ears are 16-rowed with deep, narrow, rich yellow kernels—tender, very sweet and exceptionally well flavored; stalk 6 to 7½ feet. An enormous producer. Matures a week earlier than Bantam Evergreen.

MICHAEL-LEONARD'S HYBRID GOLDEN HUMMER. (60 days). Like the open pollinated but more productive, more uniform and has a higher sugar content.

PRICE ON HYBRID VARIETIES:

Pkt., 10c; ½ lb., 25c; lb., 50c.

Cucumber - SLICING VARIETIES

IMPROVED LONG GREEN, B. S. (68 days).

Makes a heavy, long runner growth. Fruit $2\frac{1}{2} \times 10$ to 12 inches, somewhat tapered, inclined to warts, uniform in shape and size. Color medium dark with light stripe toward blossom end. One of the best of the all-purpose types; dependable cropper under all conditions of weather and soil. Very popular with Chicago market gardeners.

LEONARD'S SPECIAL DARK GREEN, W. S. (72 days).

Undoubtedly the finest of the long, large varieties. Fruit averages 14 to 15 inches in length, of very dark green color. A superb variety for the home garden.

DAVIS PERFECT, W. S. (65 days).

Fruit quite long and fairly large, tapered to both ends, smooth and uniformly well shaped. Firm flesh with a small seed cavity. Color is fine dark green, very uniform to tips. Fine shipper as it holds color and shape well.

EARLIEST OF ALL, W. S. (60 days).

The earliest of the white spine Cucumbers, medium in length, smooth and very symmetrical, while the dark green color is excellent. Its chief use is for long distance shipping; is also adapted for pickling and is grown commercially, to a large extent, in some sections. Size $7\frac{1}{2} \times 2\frac{1}{2}$ inches.

EARLY FORTUNE, W. S. (63 days).

The fruit measures 9 inches long and is slightly tapering. The thick flesh is pure white, firm and unusually crisp and very few seeds. The fruit is of rich, dark green color which does not fade when shipped.

CLARK'S SPECIAL OR IMPERATOR, W. S. (63 days).

Fruit weighs $2\frac{1}{4}$ pounds; handsome, very dark green color; slightly tapered at both ends; flesh crisp and firm and remains edible for a long time; very few seeds.

EARLY IMPROVED WHITE SPINE. (62 days).

Vines are vigorous, fruiting early and abundantly; fruit uniformly straight and handsome, dark green with a few white spines; flesh tender and of excellent flavor.

STRAIGHT 8, W. S. (66 days).

Fruit symmetrical, cylindrical, about $8 \times 1\frac{1}{2}$ inches, and well-rounded at the ends. Color deep green. Ideal for shipping.

WHITE WONDER OR ALBINO, W. S. (62 days).

Heavy, medium long runner type. Fruit 3×7 inches, with straight, blunt ends. Color is creamy white. A useful novelty (as it is fairly well flavored) for slicing and for salads.

VAUGHAN or LONGFELLOW, W. S. (72 days).

Particularly valuable for home gardens as well as for shipping. Fruit a handsome dark green, retaining the color remarkably long after picking; straight and well filled at ends. Very few seeds.

PRICE OF SLICING VARIETIES:

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.



Leonard's Chicago Pickle

Cucumber - PICKLING VARIETIES

Culture. For very early Cucumbers sow April 10th in hotbed upon pieces of inverted sod so that they can be transplanted without disturbing roots. When the ground is warm transplant into well prepared hills and protect with glass until hardened. For outdoor planting, wait until the ground is warm then sow 10 to 12 seeds in hills 4 to 6 feet apart each way, thinning 3 or 4 plants to a hill after danger from insects is over. Cultivate as long as possible; gather when large enough for use and to keep plants bearing do not allow them to ripen. Number of days are from planting to first picking.

CHICAGO PICKLE, B. S. (57 days).

A variety esteemed above all others by Chicago market gardeners and extensively grown for the large pickling establishments. Fruit medium length, square-ended, with large and prominent spines. Color a deep green. It combines all the good qualities of an early Cucumber.

EVERBEARING, B. S. (56 days).

Small size, very early and enormously productive, and valuable as a green pickle. It continues to flower and produce fruit until killed by frost.

EARLY CLUSTER, B. S. (55 days).

Vine vigorous, producing the bulk of the crop near the root and in clusters.

EARLY FRAME OR SHORT GREEN, B. S. (56 days).

An excellent sort for table use and for pickling. Fruit straight, handsome, smaller at each end, bright green; flesh tender and crisp and makes fine pickles.

BOSTON PICKLING OR GREEN PROLIFIC, B. S. (58 days).

Vine makes a heavy, rather short runner growth; fruit short, thick, very slightly tapered, blunt ends, very uniform in shape; fully developed fruit $2\frac{1}{2} \times 6$ inches. Medium dark, uniform color. Good pickler.

SNOW PICKLE, B. S. (56 days).

A choice pickling variety similar to Chicago Pickle but not so large.

WEST INDIA GHERKIN. (60 days).

A very small, oval, prickly sort, distinct from all others.

PRICES OF PICKLING VARIETIES:

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.



Leonard's Special Dark Green

Eggplant

Culture. Treat the Eggplant like a tender tomato that requires even a longer period to mature. After cabbage plants are out of the hotbed or greenhouse, which is April, sow Eggplant, keeping even the night temperature above 70 degrees. One ounce of seed gives 2000 plants, and 4 ounces plant an acre. Transplant later to pots or to a 3- or 4-inch stand, and when corn is shoe-high, put Eggplant outside on rich, well-drained land. Set the plants 2 feet apart in 4-ft. rows, shading or watering the plants if it is sunny or dry. Number of days given is time required from setting plants to marketable fruit.

NEW YORK IMPROVED PURPLE SPINELESS. (93 days). Plant makes a 2-foot growth, rather inclined to spread. Fruit oval, 6x8 inches, and tapered some towards top. Good color though not so dark as Black Beauty. It is a very heavy producer of large fruits. Unsurpassed for the home garden.

BLACK BEAUTY. (90 days). The fruit is a rich, dark purple, large and symmetrical, maturing a little earlier than Improved New York Purple, but usually not quite so large. A very desirable sort for the market as the fruit holds its color a long time.

FLORIDA HIGH BUSH. (94 days). Plant upstanding in growth, bears the fruit off the ground; fruit elongated and cylindrical, is purple in color. Highly resistant to blight and drought.

ALL EGGPLANT PRICES:
Pkt., 10c; oz., 50c; ¼ lb., \$1.50.

Endive

BROAD LEAF BATAVIAN — ESCAROLLE. (90 days). One the best varieties for salads. Leaves of upright growth, broad, more or less twisted and waved; bright deep green, with a nearly white mid-rib. Inner leaves form a fair head which blanches a creamy white. Here is something "different," yet delicious for the home garden.

GREEN CURLED. (95 days). Plant 16 to 18 inches in diameter, tufty and full in center; mid-rib an inch broad, thick, white, tender and fleshy, branches readily. Good fall variety.

MOSS CURLED. (95 days). More finely curled, with a heavier and more dense plant than Green Curled.

WHITE CURLED. (100 days). The divided leaves are of a very light yellowish-green color which blanches almost white.

FULL HEART BATAVIAN. (88 days). An improved strain of Broad Leaved Batavian, with larger leaf and broader, thicker head at eating stage; earlier in maturity. The plant is medium large with compact, well-blanching heart of infolded broad leaves, thick and buttery in texture. Excellent for market gardeners and shippers.

FRENCH ENDIVE. (See Witloof Chicory).

ALL ENDIVE PRICED AT: Pkt., 10c; oz., 15c; ¼ lb., 45c.

Culture. Endive or winter lettuce, used as a salad, as greens, or garnishing, is usually planted one-fourth inch deep in a seed bed in mid-summer, and when convenient after a month transplanted to stand 1 foot apart in 18-inch rows. When almost grown and about 2 weeks before ready to use, it is blanched by tying leaves together with soft cord, or the blanching is done by turning a flower pot or tile over each plant, or by blanching with earth, like celery. The blanching removes the green plant's acrid taste. The plant may be, but seldom is, used as an early spring crop. Three to five pounds of seed plant an acre. Number of days are from planting seed to edible stage.

Dandelion

IMPROVED LARGE LEAVED. Thick leaves and deep green color makes this far superior to the uncultivated plant. It is compact with an upright, regular tuft at the center. Pkt., 10c; oz., 75c.

Kale or Borecole

Culture. In Virginia, Kale planted in late August has some of its plants thinned out and sent to market within sixty days, and the cutting then continues until the field is clean in April. Further north, Kale is treated like a cabbage, that is, planted early in spring in hotbeds or out-of-doors, and is used in the fall when light frosts have improved it. Kale is sown in two- and three-foot drills and then thinned to six to twenty-four inches, according to varieties. One ounce sows generously one hundred yards and four pounds plant an acre.

DWARF CURLED SCOTCH. (55 days). Plant low and compact, but with large, bright, deep green leaves, curled, cut, and crimped until the whole plant resembles a bunch of moss. One of the best and most dependable types. when grown and cooked is one of the most palatable of vegetables. Used as greens.

SIBERIAN OR SPROUTS. (65 days). In this variety the very large, green leaves are comparatively plain in the center, but coarsely cut and frilled on the edge. The plant is low but spreading and very hardy.

TALL CURLED SCOTCH. (60 days). About 30 inches tall, with an abundance of dark green leaves, which are densely curled and cut, forming a very beautiful plant. It stands the winter in the middle states without any protection.

ALL KALE PRICED AT:
Pkt., 10c; ¼ lb., 25c.

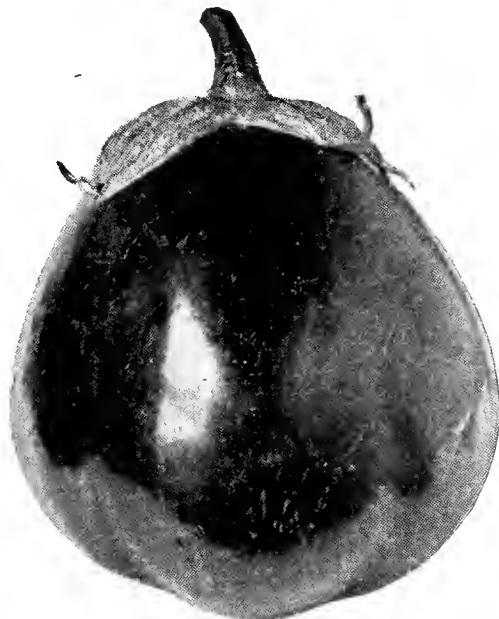
Kohlrabi

Culture. Plant in 18- to 24-inch rows as early as the ground can be worked in the spring, thinning out to stand 4 inches apart in the row. Bulbs should be used when they are 2 to 2½ inches in diameter and cooked same as turnips. Sometimes planted in hotbeds and transplanted for very early maturing Kohlrabi. One-third ounce plants 100 feet and 4 pounds an acre. Number of days given is from planting to edible bulbs.

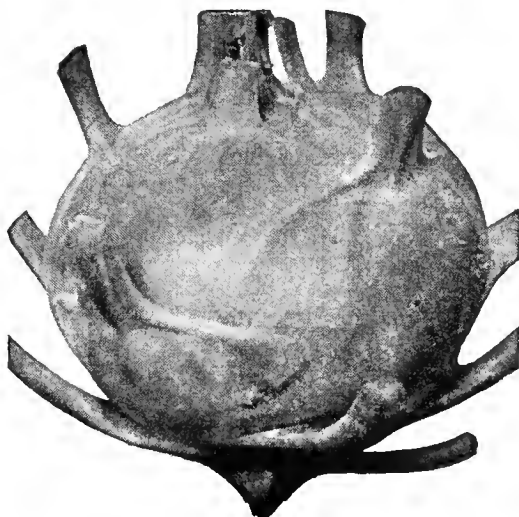
EARLY WHITE VIENNA FORCING. An extra early variety making bulbs 2-2½ inches in 55 to 60 days after seed is sown outdoors. Has very few short leaves. Bulbs are sweet and tender.

EARLY PURPLE VIENNA FORCING. (60 days). Bluish purple, similar to Early White Vienna Forcing except in color.

ALL KOHLRABI PRICED AT:
Pkt., 10c; oz., 25c; ¼ lb., 80c.



New York Improved Purple Eggplant



Early White Vienna Kohlrabi

Lettuce

Culture. As Lettuce will stand considerable freezing, it may be seeded or transplanted out-of-doors as soon as the soil can be worked in the spring. For a succession, replant every 3 weeks until within 60 days of freezing weather. The soil cannot be made too rich and the crop must be grown quickly and unchecked to be of superior quality. Lettuce is frequently started under glass, like cabbage, in hotbeds; in February transplanted to cold frames and hardened to be set out-of-doors in early April. In more southern or milder winter climates, Lettuce may be sown in autumn, protected with sash or coarse litter, and in late winter planted, transplanted, or thinned and matured where planted. When the crop is matured under glass it requires much ventilation and little heat and beware of too much water in cloudy weather. In the summer's heat, canvas or a sheltered half-shade and plenty of water is of value. One ounce of seed gives 2000 plants and 3 pounds plants an acre. In the seedbed drop 25 seeds to the foot and gently rake it in; failure may result from too deep a covering. Mature Lettuce in 12- to 18-inch rows, giving the loose-leaved varieties 3 to 8 inches in the row, and head Lettuce 6 to 12 inches. Number of days given is from sowing seed to marketable crop.

BLACK SEEDED SIMPSON. (46 days). Forms large, loose, yellowish green leaves, crumpled and frilled, exceedingly tender and crisp. Very popular home garden variety as it is very early.

NEW YORK NO. 12 OR WONDERFUL, W. S. (78 days). One of the very best of the curled or crisp heading varieties. The head, at first pointed or conical, becomes globular at maturity, and is of medium large size, dark green in color and slightly curled on edges. Heads are very hard and well blanched. Quality is excellent, being sweet, yet never buttery in flavor. Home gardeners around Chicago find this variety dependable and most satisfactory.

PRIZEHEAD, W. S. (47 days). The name is misleading as it is a non-heading variety. Very early, quick growing, making a lot of good eating leaves of excellent flavor. Leaves are light green with very ragged brown edges. A most popular variety with home gardeners.

ROMAINE OR PARIS WHITE COS, W. S. (77 days). The best known and most popular cos variety in America. It is medium large, medium green, and forms a good, well formed head of fine quality, which blanches readily.

BIG BOSTON, W. S. (76 days). Head of medium size, compact, with creamy yellow heart. Leaves smooth, glossy, wavy at edge and slightly tinged with brown. Quality excellent. A popular variety for outdoor culture.

BIG BOSTON, B. S. (76 days). Similar to regular Big Boston but has larger outer leaves and the head is usually not so firm.

WHITE BOSTON OR UNRIVALED, W. S. (76 days). Similar to white seeded Big Boston but with leaves slightly lighter green and free from a brown tint; heart buttery, yellow; of excellent quality. Highly desirable for nearby markets.

CHICKEN LETTUCE, W. S. (35 days). A dark green cutting Lettuce; butter type, producing the largest supply of leaves of any known Lettuce. Grown for poultry and rabbit feed.

ICEBERG, W. S. (80 days). Large curly leaves of bright, light green with a very slight reddish tinge at the edges. The unusual solidity of the heads is insured by the large white main ribs of the leaves, each of which curves strongly to the center, making it impossible for the leaves to open outward and expose the center which is constantly and thoroughly blanched.

IMPROVED HANSON OR NONPAREIL, W. S. (78 days). Plant very large with thick yellowish-green leaves; heads large, firm and cabbage-like with sweet, tender heart. Good for midsummer planting and popular with home gardeners.



Black Seeded Simpson

MAY KING., W. S. (62 days). Plant this Lettuce for the first early head Lettuce. It is equally good for outdoor planting or forcing. The outer leaves have a slightly brownish tinge, while the heart is a beautiful yellow, very crisp and tender.

CALIFORNIA CREAM BUTTER, B. S. (75 days). Popular with market gardeners and home gardeners. Heads large and globular with golden yellow interior. Leaves large, thick, dark green tinged and spotted with brown.

EARLY CURLED SIMPSON, W. S. (45 days). Forms a close, compact mass of curly, yellowish green leaves; early, hardy plant. Leaves are tender, sweet, and of excellent quality. An old favorite with home gardeners.

EARLY CURLED SILESIA. Similar to Early Curled Simpson.

GRAND RAPIDS, B. S. (43 days). An excellent forcing variety as well as one of the best for outdoor planting. Plant erect; leaves medium light green, very curled and fringed. Stands heat and dry weather well.

PRICES OF LETTUCE: Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Leek

Culture. This mild member of the onion family is used in soups and salads. Sow one ounce to one hundred feet of row and four or five pounds to the acre, one-half inch deep, as early as the soil can be worked in spring. Thin the plants to a stand of four to six inches in twelve- to eighteen-inch rows. It is advisable to throw earth to the plant to blanch it, very much as celery is blanched.

LARGE AMERICAN FLAG. Makes large, dark green leaves and medium large bulbs on a pure white stem $1\frac{1}{2}$ to 2 inches by 7 inches. It is very hardy and productive.

LARGE MUSSELBURG. The large variety, often 3 inches in diameter, and becoming very white and tender. A hardy and desirable sort.

PRICES OF LEEK: Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Muskmelon

Culture. For Muskmelon follow our cultural directions for cucumber except that where a robust growing variety of Muskmelon is grown, a space of as much as 6x6 feet is sometimes required between hills. One ounce of seed plants 50 hills and 3 pounds plants an acre. The crop, or the last planting for a succession should be in June. While not necessary it is advisable to pinch off the branches of Muskmelon if a quick matured or larger or better fruit is required. Pick the melon when it parts from the stem without difficulty and store a few days in a cool room. Number of days are from planting to ripe fruit.

HONEY ROCK OR SUGAR ROCK. (85 days). Fruit 5x5½ inches, nearly round, no ribs, coarsely netted, gray-green to light yellow as it ripens. Flesh is very thick, tender, salmon-pink in color, and very well flavored. Very small seed cavity. This is a new type that has become very popular with home and market gardeners. Just right for a breakfast melon.

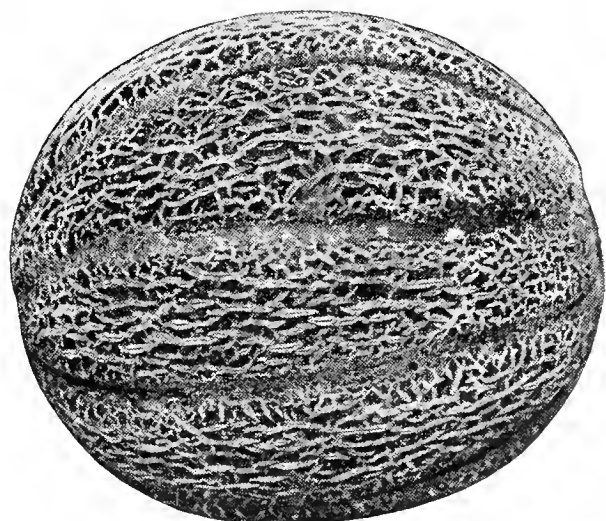
HEARTS OF GOLD. (90 days). Fruits 5 to 5½ inches, nearly round, very slightly ribbed, finely netted, light green to light yellow as it ripens. Flesh is very thick, firm, and delicious. Very small seed cavity with a tight web. Color a bright yellow shading to pink. Stands shipping very well. Excellent for the home garden.

HALE'S BEST, NO. 36. (83 days). Fruit 5x5½ in., nearly round, very lightly ribbed, finely netted, green shading to light yellow as it ripens. Flesh thick, firm, stringless, and very well flavored; not too sweet. Very small seed cavity with tight web of a salmon-pink color. An exceptionally fine early strain for long distance shipping purposes. Home gardeners like its productivity and delicious flavor.

MILWAUKEE MARKET. (87 days). A medium large, early maturing pink fleshed melon with excellent eating qualities. The ribs are fairly prominent and the netting is very heavy. The shape is slightly oval, the rind extremely hard, making it an excellent shipping variety.

BENDER'S SURPRISE. (94 days). Fruits 8x7½ inches. It is the largest of the pink fleshed melons of oval shape, early for a melon of this size. The flesh is of exceptionally high quality. It has coarse netting, distinct ribs and the rind is very hard, enabling it to be shipped some distance.

BURRELL'S GEM. (95 days). Fruit 4x6 inches, tapered oval, slightly ribbed, thick fine netting. Color is green shading to deep yellow as it ripens. The flesh is thick, firm, orange-pink in color, of excellent flavor, with a small seed cavity. It is an excellent shipping melon.



Hearts of Gold

BANANA. (96 days). Fruit 3x14 inches, long, slim, tapered, slightly ribbed and tapered to both ends. Yellowish green to yellow as it ripens. Flesh is thick, salmon in color; small seed cavity, and if picked just as it ripens is very well flavored.

HACKENSACK, EXTRA EARLY. (82 days). Medium to large size, nearly round or somewhat flattened, evenly and deeply ribbed, with very coarse netting. Skin is green, slightly tinged with yellow as the fruits mature. Flesh is green, a little coarse, but juicy and sweet.

HACKENSACK, LARGE OR TURK'S CAP. (90 days). A very large, green-fleshed melon. The vines are hardy, vigorous, and productive. The fruits are nearly round, usually somewhat flattened; ribs are large and of irregular width, densely covered with coarse netting.

LAKE CHAMPLAIN. (87 days). This very early maturing melon produces almost round, medium sized melons, well netted, moderately ribbed, thick fleshed, sweet, and melting, of golden yellow color. The plants are hardy, vigorous and very productive.

OSAGE or MILLER'S CREAM. (94 days). Is of medium size, oval in form and dark green in color, somewhat netted and slightly ribbed. The flesh is extremely and uniformly thick, of firm texture and rich salmon in color, highly flavored and delicious to the rind. Seed cavity very small. It is a remarkable keeper and a good shipper.

PAUL ROSE or PETOSKEY. (90 days). Fruits oval, slightly ribbed and densely netted; vines vigorous and productive. A yellow fleshed sort of suitable size for a crate melon and of excellent quality.

POLLOCK 10-25. (95 days). Fruit round, averaging 5 inches, little or no rib, heavily netted, medium light green shading to a dark yellow. Flesh very thick, salmon tinted, solid, fine grained, and of exceptionally fine flavor. Very small seed cavity.

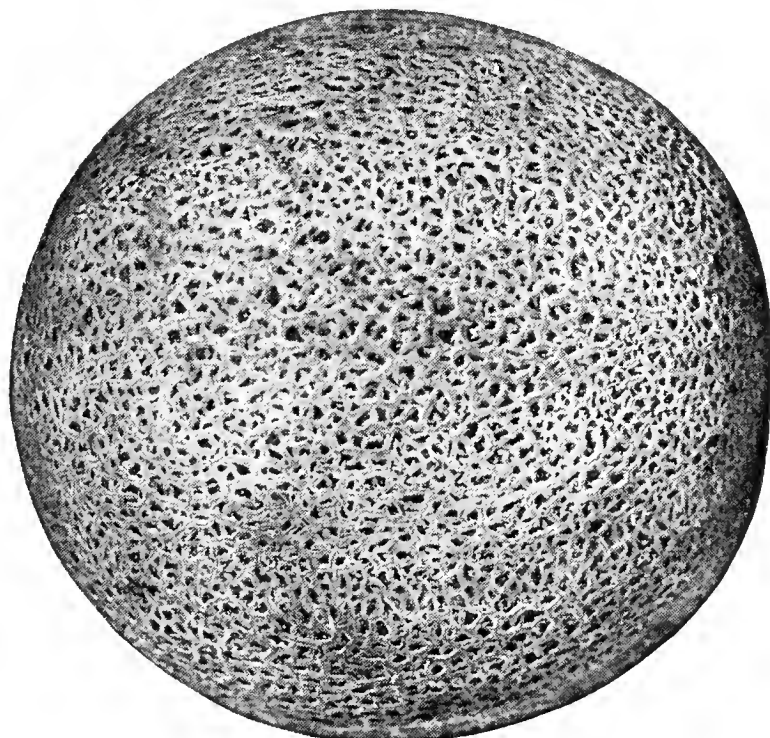
ROCKY FORD, GREEN FLESHED. (95 days). Almost round in shape, covered with netting and averaging about 5 inches in length; flesh green, very sweet and highly flavored.

DELICIOUS GOLDEN LINED ROCKY FORD. (93 days). Fruits 5¼x5¼ inches, very slightly oval, no ribs, finely netted. The flesh is very thick, solid, tender, sweet, green outer to a bright yellow center. Very small seed cavity. Excellent keeper and long distance shipper.

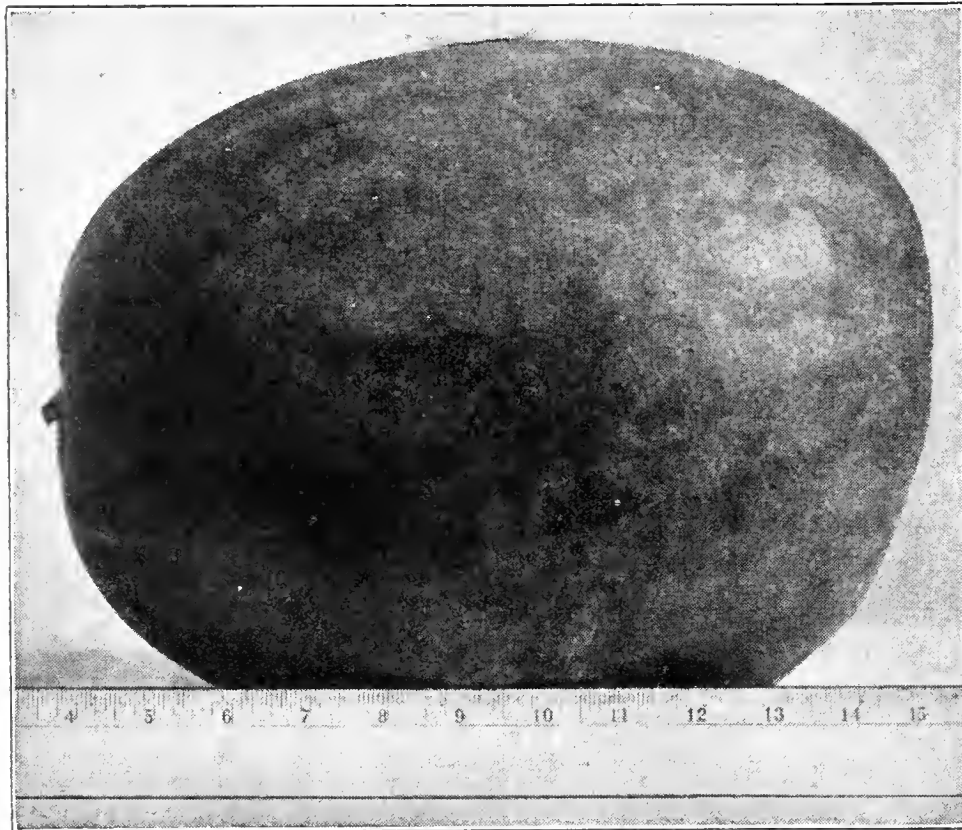
TIP TOP. (89 days). This very productive melon is of medium to large size, nearly round, slightly ribbed and fairly well covered with shallow netting. The flesh is deep yellow in color, sweet, juicy and of finest flavor, firm but not hard; edible to the very coating.

ALL MUSKMELONS PRICED AT:

Pkt., 10c; oz., 15c; ¼ lb., 50c.



Honey Rock



Stone Mountain

The Michael-Leonard Seed Company has general offices at Chicago, Illinois, and Sioux City, Iowa, and maintains branches at the following locations:

Normal, Ill.	Ottumwa, Ia.
Des Plaines, Ill.	Ames, Ia.
Columbus, Wis.	Billings, Mont.
Carroll, Ia.	Ontario, Ore.
Boone, Ia.	Moscow, Idaho.
Pella, Ia.	Ashton, Idaho.
Algona, Ia.	Mankato, Minn.
Muscatine, Ia.	Sioux Falls, S. Dak.
Iowa City, Ia.	Norfolk, Neb.
Red Oak, Ia.	Grand Island, Neb.

Culture. For Watermelons follow our cultural directions for cucumbers, except that it is necessary to give the watermelon a space of 8 to 10 feet between the hills, and thin the plants to two to the hill. One ounce plants 25 hills, and three pounds of seed will plant an acre. Number of days given are from planting to ripe fruit.

Watermelon

COLE'S EARLY or HARRIS EARLY. (80 days).

The best of the extra early sorts. Fruits slightly oval with irregular mottled stripes of light and dark green. Flesh bright red, sweet and tender. A desirable variety where the season is short. It is hardy, productive and the largest of the early kinds. Highly recommended for home use.

STONE MOUNTAIN. (88 days). A very large, medium dark green round melon of excellent quality. Flesh highly colored, very solid, with fewer seeds than most Watermelons. It has gained a well deserved popularity in the South where the fruits frequently attain a weight of 60 to 80 pounds. The rind is tough enough to stand handling for nearby markets, but will not stand long distance shipping.

IMPROVED KLECKLEY'S SWEETS, W. S. (88 days). A very valuable melon, wonderfully productive; long, thick, and uniform in size. Color of rind dark bluish green. Flesh sparkling red, sweet and entirely free from hard centers.

TOM WATSON. (91 days). A large melon similar in shape and splendid quality to Monte Cristo, but averaging larger in size and with a tougher rind, making it especially adapted to shipping. The rind is dark green with distinct, fine veining; flesh is rich red, sweet, and tender. One of the best shippers.

CITRON, RED SEEDED. (95 days). For preserves and candied fruit. Round, green fruits, distinctly marked with irregular stripes. Flesh white, very firm and solid. Not good to eat uncooked.

DIXIE QUEEN. (85 days). Fruit round or blunt oblong, grey with prominent dark green stripes. Flesh richly colored, firm, sweet and juicy, with very small white seeds. Good shipper.

FLORIDA FAVORITE. (88 days). A very large, long melon, mottled dark green with stripes of lighter shade. Rind thin but firm; flesh very bright, deep red, very sweet, tender and of excellent flavor.

GYPSY OR GEORGIA RATTLESNAKE. (94 days). Fruit cylindrical, square at the ends, smooth and distinctly striped and mottled light and dark green. Flesh bright scarlet and very sweet.

GOLDEN HONEY (Yellow Meated). (90 days). The best of the yellow fleshed melons. It is oblong in shape and the average weight is 20 pounds. Dark green rind with irregular stripes of darker green.

HALBERT HONEY. (85 days). Fruit long, 12 by 18 inches, slightly tapered, dark green with lighter green veins or net. Flesh rich, bright red, fine grained, sweet and well flavored. Skin thin and crisp; seed white with black tip and rim. Excellent garden type.

SWEETHEART. (89 days). This Melon is large, handsome, heavy and productive. The shape is oval and the color mottled light to a very light green. Flesh bright red, solid but tender and very sweet.

LONG LIGHT ICING OR GREY MONARCH. (85 days). Fruit long and slender, 8 by 14 inches, light green with fine net of greyish green. Flesh bright red, firm and crisp, well flavored and sweet. The skin is thin and quite brittle; seed small and white. Good garden and home market type.

IRISH GREY. (90 days). Fruit is long, oval, blunt at both ends, light greyish green color. Flesh is bright red, sweet, firm and very well flavored, with few seeds. The skin is thin but quite tough; seed white.

WINTER KING AND QUEEN. (85 days). Skin is light cream with faint stripes of light green. Prolific and of excellent quality. Properly stored it will remain edible for several months. Good shipper.

IMPROVED BLACK-SEEDED KLONDIKE. (83 days). For genuine merit, not surpassed by any other kind. Rind dark green with attractive bright red flesh. Seeds small and black.

PEERLESS OR ICE CREAM. (84 days). Fruits short, oblong, medium green, with fine veining; rind thin and tender. Flesh bright red, very sweet; seed white.

PHINNEY'S EARLY. (85 days). Fruit long with blunt end, 8 by 16 inches, in mottled shades of green. Flesh bright pink, not too firm, sweet and well flavored; loose seed web with a great many seed. Rind is thin and brittle; seed white with black tip. Good garden type of large early Melon.

ALL WATERMELONS PRICED AT:
Pkt., 10c; oz., 15c; ¼ lb., 30c.

Mustard

Culture. Mustard is grown for its seed which is used for flavoring or medicinal purposes, or grown for its leaf which is used in salad or cooked like spinach. Sow Mustard as soon as the soil can be worked in spring and every three weeks for a succession, or in the South it may be sown in the fall for early spring greens. Cover the seed lightly in 12- to 18-inch drills. Cut the leaf when not over four inches high. Number of days given is from planting to cutting.

SOUTHERN GIANT CURLED. (35 days). Leaf very wrinkled, blistered and curled at the edges; light yellowish green in color. Very prolific. Holds fairly well for spring planting but is mainly used in the South as a winter greens crop. Seed dark brown in color.

CHINESE BROAD LEAF. (35 days). Plant medium large and vigorous; leaves broad, large, oblong and slightly crumpled; medium green; scalloped at edges. Seed reddish brown in color.

FLORIDA BROAD LEAF. (40 days). Leaf very large, broad, long oval with smooth saw-toothed edge and broad white mid-rib; bright green in color. Makes a strong, quick growth, spreading out somewhat more than other smooth types. Holds well in hot weather. Seed dark brown in color.

LARGE SMOOTH LEAF or BLOOMSDALE. (35 days). An excellent variety with very large, green, comparatively smooth leaves borne well above ground. Quick growing, fairly upright when young but becoming somewhat spreading when matured. Preferred by many because it is more easily prepared for the table than the rougher leaved varieties.

WHITE LONDON. (30 days). A rapid growing, upright plant, which quickly goes to seed. Leaves small, dark green, smooth and deeply cut. The large, light yellow seeds are used largely for ground Mustard.

MUSTARD-SPINACH or TENDERGREEN. (30 days). Plant of rapid and vigorous growth with comparatively narrow, spoon-shaped leaves of dark green. It will stand longer than most varieties without sending up seed stalks. Combines the flavor of Mustard and Spinach. Seed dark brown.

ALL MUSTARD PRICED AT: Pkt., 10c; $\frac{1}{4}$ lb., 25c.

Okra

Culture. The pods of this plant are used in a great number of ways throughout the southern states, and the plant should be more frequently grown in the North. Plant at corn planting time in rich land, sowing the seed thickly in two- to three-foot drills, and thinning to an eight- to twelve-inch stand, according to varieties. A generous planting is two ounces to one hundred feet and ten pounds to the acre. Okra seed may be planted six seeds to the hill, two to three feet apart and thinning to two plants to the hill.

PERKINS' MAMMOTH LONG POD. Stalks 4 to 5 feet tall; treelike growth. Pods 6 to 7 inches, pointed, ribbed and usually slightly curved. Tapered and medium dark green in color. Very productive and medium early. Main canning variety.

WHITE VELVET. Stalk 5 to $5\frac{1}{2}$ feet tall; rather slender, treelike growth. Pods are 6 to 7 inches long, slim, pointed, somewhat ribbed and light cream colored. Productive and early. Fine garden type.

DWARF GREEN. An early dwarf growing sort with dark green, fluted, pointed pods 5 to 7 inches long; quite prolific.

LONG GREEN. Like Dwarf Green but somewhat taller; stalks 4 to 5 feet tall. Pods are like the dwarf.

ALL OKRA PRICED AT: Pkt., 10c; $\frac{1}{4}$ lb., 20c.



Southern Giant Curled Mustard

Onion Sets

We have grown Onion Sets for over 50 years and the knowledge gained in growing, storing, grading and shipping over this length of time assures our customers a superior product.

JAPANESE or EBENEZER. A yellow variety of great merit. A heavy yielder and good keeping Onion. Does not run to seed readily.

YELLOW. Grown from seed of Strasburg or Yellow Danvers, either of which we can furnish. Yellow is the standard color for Onions in many large markets.

RED. Grown from the Red Wethersfield variety and will produce marketable Onions several weeks earlier than seed. Also very desirable for green Onions.

WHITE. Grown from White Portugal seed. White sets produce the finest early green Onions and no garden should be without them.

BROWN. Grown from Australian Brown seed. Excellent keepers as sets. Are very hard and solid.

WHITE PEARL. This is the early waxy silvery white Onion that for mildness of flavor is probably not surpassed. For fall planting only.

BERMUDA. These sets produce the pale yellow, slightly flattened Onion, with white flesh, at times slightly suffused with pink. For fall planting only.

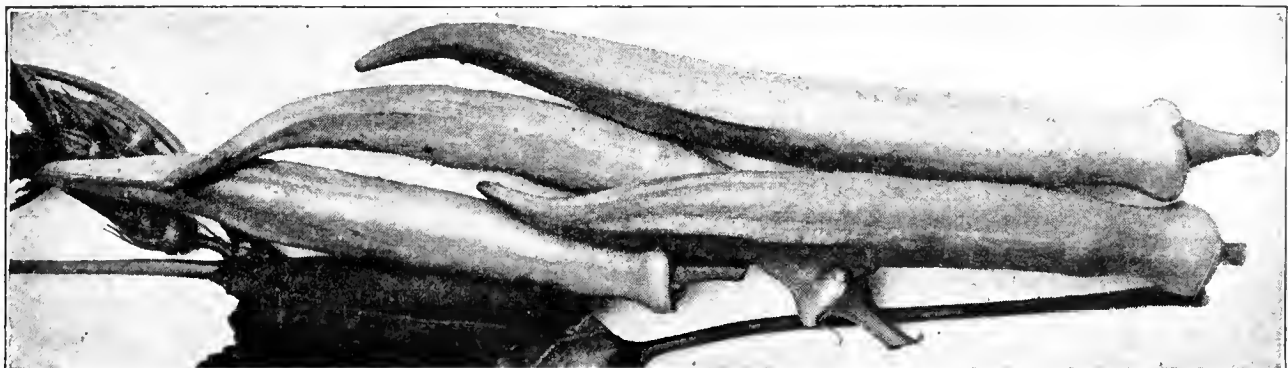
CRYSTAL WHITE WAX. Produces large, pure white, flattened Onion of mild flavor. For fall planting only.

YELLOW SHALLOTS or MULTIPLIERS. The clumps are divided and they multiply very abundantly. Are grown largely for flavoring.

YELLOW POTATO. The old original English Multiplier.

WINTER TOP, EGYPTIAN or PERENNIAL. These are very hardy; they need no protection during the winter and will continue for many years to yield an abundant supply of green Onions without replanting.

PRICES ON APPLICATION.



Okra or Gumbo

Onion Seed

RIVERSIDE SWEET SPANISH. (105 days). A large, well shaped Onion, weighing from 1 to 3 pounds, unusually mild but still retaining its genuine Onion flavor. Planted at the proper time and thoroughly cured it is a good keeper and will ship as well as any other shipping Onion. To produce larger size they should be thinned 6 to 8 inches between plants. Very popular for home use.

YELLOW GLOBE SOUTHPORT. (116 days). A large, perfectly shaped Globe Onion and an excellent one for keeping throughout the winter. A very heavy cropper, a good dark yellow color and handsome in appearance. We sell huge quantities of this seed in Chicago, where it is practically the standard.

WHITE GLOBE SOUTHPORT. (112 days). Bulbs round and of good size; solid, pure white skin, thin and brittle. Good for winter storage. Also used by market gardeners for early bunching.

RED GLOBE SOUTHPORT. (115 days). A perfect globe shape, deep red skin and red flesh tinted white. Skin is thin, tough, close fitting over medium thin layers of firm, fine grained, strongly flavored flesh. Makes a medium large bulb, averaging 2½ to 3 inches in diameter. One of the best winter keepers.

PRIZETAKER. (104 days). Very productive, large sized Onion, especially good for fall marketing. Bulbs globe-shaped, light yellow in color, with white flesh of mild flavor. For best results plant this variety in beds and transplant.

MICHAEL-LEONARD'S BUNCHING ONION. Grows 14 to 18 inches high, the pure white part extending 2 to 3 inches up the stalk; flavor excellent. This variety stands the heat well and will stay in bunching condition a long time. Not recommended for large Onions.

BOTTLE or JUG. (110 days). Long and narrow, about 2 inches thick; color light and rather faded in appearance; mild flavored. We have the genuine stock.

JAPANESE or EBENEZER. (110 days). Used mostly for growing sets. One of the best keeping Onions on the market. Does not run to seed readily. Bulbs 2 to 3 inches, deep flat in shape, deep yellow and very firm, with thick skin.

MOUNTAIN DANVERS. (100 days). Bulbs three-quarter globe shape, slightly flattened at the base; dark yellow and medium early. Productive and of good shipping quality.

WHITE SWEET SPANISH. (112 days). Bulbs large, globular shape with small neck; pure white. Flesh clear white, firm and mild. Very attractive and a fair keeper.

CRYSTAL WHITE WAX. (90 days). This variety is popular in the South where the transplanting method of culture is practiced. A large, beautiful, silvery white skinned variety of handsome, flat shape and of very fine flavor and quality.

YELLOW GLOBE DANVERS. (116 days). Bulbs medium large, globe-shaped, yellow with white flesh, firm and hard; good keeper.

GOLDEN GLOBE—SEMI-BOTTLE ONION. (118 days). Popular for growing globe-shaped sets of excellent keeping quality; very productive. Bulbs strongly oblong-globe, or bottle neck in shape, rich golden yellow; firm and hard.

LARGE RED WETHERSFIELD. (104 days). Bulbs 2 to 2½ inches thick, flat, deep red; flesh pinkish white and very firm. Used extensively for growing sets.

WHITE PORTUGAL or SILVERSKIN. (100 days).

A medium thick, flat shape when mature, averaging 3 inches; white skin and flesh, sometimes green tinted; thin layers of firm, crisp, fine grained flesh, quite mild in flavor. Skin is fairly tight and tough. Stores well for a white Onion. Used mainly for growing Onion sets and small pickling Onions.

WHITE LISBON. A variety grown largely as a bunching Onion. When mature the round, white bulbs are about 3 inches in diameter.

YELLOW BERMUDA, STRAW-COLORED. (90 days). A pale or straw-colored Onion grown extensively in the Bermudas and southern part of the United States for early shipping to northern markets.

Culture. As soon as the soil can be worked in spring and not after May 1st, sow Onion seed in 12- to 15-inch rows, leaving out every 10th row as a weed alley, if preferred. One ounce of seed plants 150 feet and 4 to 5 pounds plant an acre. Seed should be covered firmly one-fourth inch deep. Quantities of manure had best be applied in the year before the planting and much commercial fertilizer, high in potash, harrowed in immediately before seeding. Begin cultivation as soon as the plant can be seen; cultivate frequently and when convenient thin to a stand of two or four inches.



Riverside Sweet Spanish



Champion Moss Curled Parsley

Parsley

Culture. Parsley used for garnishing and for seasoning can be planted as soon as the soil can be worked in spring. Cover the slow germinating seed one-fourth inch deep in 12- to 18-inch rows. One-fourth ounce sows 100 feet and 3 to 5 pounds plant an acre. To improve the appearance of the crop, trim the plants with a sickle two or three times during their growing season and at the approach of winter transplant to cold frames or a sunny window. Parsley may be mulched with coarse litter and wintered for spring use till the new crop begins.

HAMBURG or ROOTED. Mostly grown for the thick, fleshy roots. The roots are nearly white in color, growing about 6 inches long and about 2 inches thick around the neck and gradually tapering toward the base. The flesh is white and somewhat dry. Used for flavoring soups, stews, etc.

CHAMPION MOSS CURLED. Leaves are a uniform dark green color, very finely cut and so closely curled as to resemble bunches of moss. One of the most useful and decorative sorts; fine for bunching. A little Parsley can be grown right in your flower beds and always be handy for use.

DOUBLE CURLED. The standard sort for outdoor culture; also highly prized by market gardeners for the greenhouse.

PLAIN or SINGLE. Leaves flat, deeply cut but not curled. Often preferred on account of the very dark green color as well as the hardiness of the plant and its superiority for flavoring.

PARAMOUNT. A new and improved triple-curved variety with unusually rich dark green foliage tightly curled. Ideally suited for home and market gardens.

ALL PARSLEY PRICED AT: Pkt., 10c; ¼ lb., 30c.

Parsnip

Culture. Plant Parsnip seed as early as the soil can be worked in spring and do not cover this slow germinating seed deeper than one-fourth inch. Use 18- to 24-inch rows, thinning the plants to a 4-inch stand. One-half ounce of seed sows 100 feet and 3 to 5 pounds plant an acre. This crop requires the entire season to mature, and as frost improves the roots, they may be left in the ground all winter. Both as to quantities and its feeding value, the Parsnip is a valuable stock feed.

IMPROVED HOLLOW CROWN. Roots 12 to 16 inches long, white, smooth, tender, sugary and of most excellent flavor. Very hardy and will keep through winter without protection.

GUERNSEY IMPROVED. Roots white, 12 to 14 inches long, very tender with a smooth, clean skin. The variety is easily distinguished by the leaves growing from depression on top or crown of the root.

WHITE QUEEN. Similar to Improved Hollow Crown. Free from side roots and very white; an excellent market variety.

ALL PARSNIPS PRICED AT: Pkt., 10c; ¼ lb., 30c.

Peas—Smooth Seed

Culture. All varieties of Peas, regardless of height, may be grown successfully without a trellis or support. As Peas vary in height from 1 to 6 feet, it follows that the distances in the row and apart in the row should vary. Dwarf or half-dwarf varieties are best planted in double or companion rows 6 inches apart to support and shade each other in their growth; then leave a space of 18 to 30 inches, according to height of the variety and repeat the double row. The tall varieties that may be given support are planted in a single row, the space between the rows somewhat less than the height of the variety. Drop 10 to 20 dwarf Peas to the double row or 6 to 10 tall Peas to the foot of row, using 2 pounds to 100 feet and 150 to 180 pounds to the acre. Plant all Peas about 5 inches deep in soil that has been deeply plowed, which gives the Peas the cool, damp climate they prefer. Lightly harrow or rake the soil when the Peas should be breaking through and continue to cultivate until the vine stops the work. All Peas stand some frost and may be planted as soon as the soil may be worked in spring. Peas should be planted frequently for a succession. The early varieties are planted in August for a late autumn crop. For quality's sake pick Peas before they crowd the pod and pick all pods as rapidly as produced to somewhat extend bearing period. As all varieties of Peas lose their characteristics when left without the selection given by expert seedsmen, it is necessary to go to a reliable source for seed Peas.

Notice. The number of days given is taken from our trial ground records made during the season of 1932 in Wisconsin. Weather conditions, variations in soil and cultivation, as well as difference in latitude, will make either a longer or shorter period of growth.

ALASKA WILT-RESISTANT. (52 days). Well known and extensively used, especially by canners. Very early and when carefully grown uniform in ripening. Vine is strong and vigorous, 2 to 2½ feet high, of a peculiar light green color; pods 2¼ to 2¾ inches long, straight and blunt at the end, and light in color. Seed round, blue and slightly pitted. Our seed is now all of the wilt-resistant type. This is especially dependable for home use.

LAXTON'S SUPERB or EARLY BIRD. (60 days). A hardy early variety, growing 18 to 20 inches in height, with dark green, 4-inch, semi-broad, pointed pods of fair quality. Desirable as a gardener's first crop Pea, standing very early planting. Seed dark green, dimpled.

FIRST AND BEST or EXTRA EARLY. (54 days). Early, productive and hardy with a strong, vigorous vine, which is light in color and uniform in growth, 2½ to 3 feet in height and bearing straight pods 2½ to 2¾ inches long, round, light in color and blunt at the ends. Seed round, rather small and white in color.

MAMMOTH MELTING SUGAR, WHITE-SEEDED EDIBLE POD. (72 days). Large, edible pods, 4 to 4½ inches long and 1⅛ inches broad. Vine grows to a height of 48 inches. The seed is large and a creamy white in color.

AMEER or CLAUDIT. (60 days). Resembling the Alaska in appearance, 3 feet in height with pale green foliage. Pods 3 inches in length, pointed, dark green in color. Seed blue, dented and medium pitted.

MARROWFAT, WHITE. (78 days). Vines hardy, strong, vigorous and bearing broad, thick, leathery pods near the top of the vine, which contain Peas of a fair quality. Vine 50 to 60 inches in height. Foliage light green in color; pods 3 inches long, blunt and light green in color. Seed large, smooth, white.

ALL PEAS PRICED AT:
Pkt., 10c; ½ lb., 15c; lb., 30c.

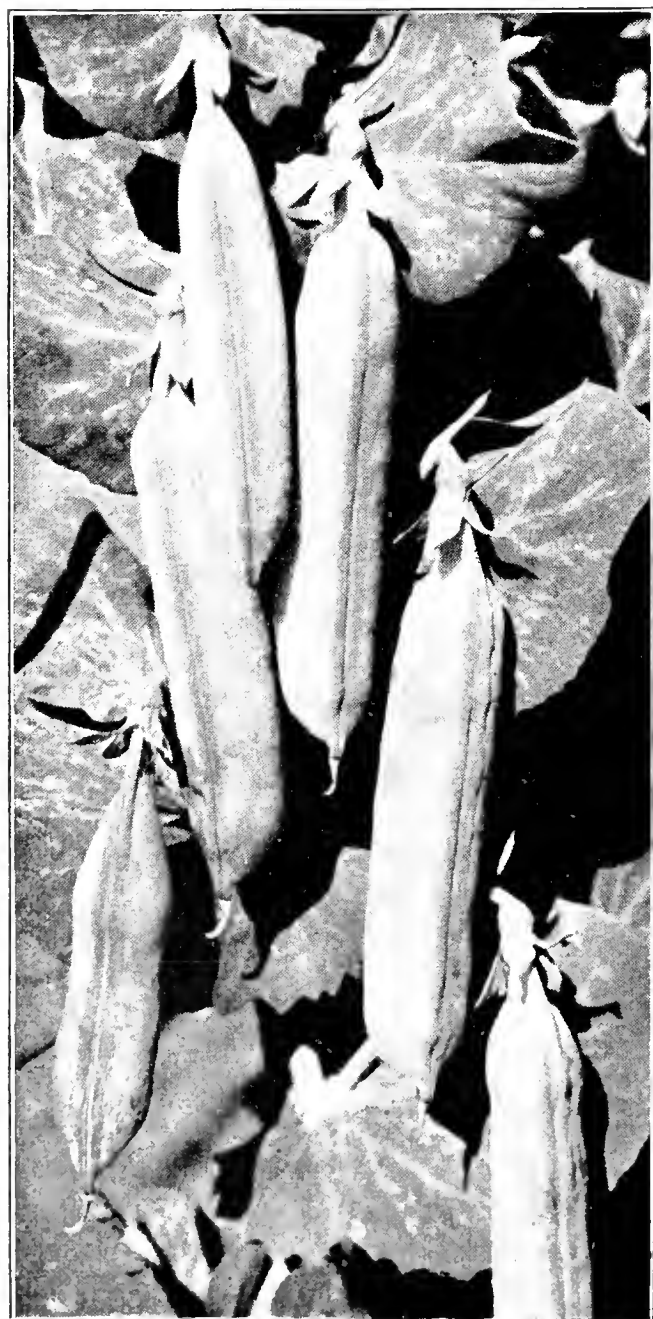
Peas—Wrinkled Seed

LAXTONIAN. (58 days). Vines vigorous and productive, growing to a height of 18 inches; foliage dark green. Pods about 4 inches in length, dark green, straight and pointed. Seed light green, large, wrinkled, flattened and irregular in shape. Chicago's home gardeners grow lots of Laxtonian with fine success.

ALDERMAN or DARK-PODDED TELEPHONE. (70 days). A large-podded Pea of the Telephone type, very robust and vigorous as to vine, which attains a height of 48 inches; foliage medium green. Pods 5 inches long, broad, pointed, dark green in color. Seed green, wrinkled, large. Dependable and productive.

TELEPHONE. (70 days). Same as Alderman.
AMERICAN WONDER. (57 days). Vigorous vines with a luxuriant foliage, growing from 12 to 14 inches high. On account of its dwarf habit of growth it is very desirable for private garden use. Pods are light colored, straight, round, about 2½ inches long and blunt at the end. Seed is wrinkled, green, medium in size and square at the ends.

ALL PEAS PRICED AT:
 Pkt., 10c; ½ lb., 15c; lb., 30c.



Little Marvel

NOTT'S EXCELSIOR. (50 days). Resembling Gems in habit but more dwarf and uniform in growth. Height 14 to 17 inches with rather light foliage. Pods are light in color, round, about 2½ inches long, blunt at the ends. Seed green, wrinkled, medium in size and square at the ends.

DWARF GREY SUGAR. (66 days). The old variety of the edible podded sort and used in no other way. Grows about 2½ feet high and is remarkable for its earliness. Pods are broad, flat and crooked, containing 5 to 6 Peas. Seed is brown and wrinkled.

LITTLE MARVEL. (60 days). An extra fine dwarf, sweet Pea. Pods somewhat larger than Nott's Excelsior. A fine variety for either private or market garden. Height 16 to 18 inches; foliage and pods very dark green. Pods 3 inches long, nearly round and square-ended, containing seven very dark green Peas of high quality. Very productive. Seed light green, medium size, squared, wrinkled.

CHAMPION OF ENGLAND. (76 days). Strong and vigorous in growth, 54 to 60 inches in height; foliage medium green. Pods 2½ to 3 inches long, blunt, and medium dark green in color. Seed large, green, very much wrinkled.

EVERBEARING. (76 days). Vigorous and branching in habit and growth; height 3 feet. Pods 2¾ to 3 inches long, broad, light colored and blunt. Seed green, wrinkled, large in size.

McLEAN'S LITTLE GEM. (62 days). Strong and vigorous in growth, producing vines from 22 to 24 inches in height; dark foliage. Pods are almost straight, 2½ to 2¾ inches long, light in color and blunt at the ends. Seed is green, wrinkled and medium in size.

GRADUS or PROSPERITY. (62 days). A standard, early, large-podded variety, very popular with market gardeners. Height 3 feet. Vine and foliage moderately heavy and medium green. Pods medium green, 3¾ inches long, semi-round, straight and pointed, containing 6 to 8 large, very sweet, medium green Peas. Moderately productive and of high quality.

LAXTON'S PROGRESS. (58 days). Dark green Peas, sweet and luscious. The dwarf, vigorous vines average 18 inches in height and carry enormous crops of large, deep bluish green pods. These measure 4 to 4½ inches long and are tightly packed with 8 to 10 luscious Peas.

MAMMOTH-PODDED MIDGET. (50 days). Height of vine 15 inches; pods 4½ inches long, containing 7 to 8 large dark green Peas.

POTLATCH. (70 days). Strong, vigorous vines of even growth, 24 inches in height, with luxuriant, dark foliage, bearing pods medium green in color, 4 to 4½ inches in length, broad and pointed at the ends. Seed green, wrinkled, large in size.

STRATAGEM. (72 days). A vigorous, hardy and luxuriant vine, bearing large pods which contain Peas of excellent quality. A heavy cropper although it has a tendency to sport. Vines 22 inches; foliage dark green; pods 4½ inches long, straight, broad, pointed, dark green in color. Seed very large, green, wrinkled.

DWARF TELEPHONE or DAISY. (70 days). Vines 20 to 22 inches high with rather coarse foliage, medium light green, bearing pods broad, straight and about 4 inches long, pale green in color and well filled with Peas of excellent flavor. Seed pale green, large, wrinkled.

THOMAS LAXTON. (60 days). A very popular variety. Height 2½ to 3 feet; vine and foliage moderately stout, medium green. Pods medium green, 3½ inches long, straight, nearly round and square ended, containing 7 medium dark green Peas of superior quality. Seed large, cream colored, wrinkled.

WORLD'S RECORD. (60 days). An improved type of Gradus, being slightly earlier, more dwarf, true to type and productive. Height 2 to 2½ feet. Vines moderately stout, medium green. Pods medium green, 4 inches long, very broad, pointed and well filled with 7 to 9 very large, dark green Peas of exceptional quality. Seed large, cream and green, wrinkled.

Pepper

CALIFORNIA WONDER. (76 days). Plant 2½ feet high, medium light green, making a strong, upright growth. Fruits are large, 3½ to 4 by 5 inches, squared, usually four lobes, very thick walled, sweet and mild in flavor. From a deep green to a bright red in color. The most attractive appearance and thick wall make it an excellent type for stuffing.

SWEET MOUNTAIN. (75 days). Plant 30 inches tall with medium light, upright bushy growth. Fruit medium large, 2½ by 5 inches, squared, slightly tapered, deep green to a very bright red in color, usually 3 or 4 lobes, high side ridge, medium thick side wall. One of the sweetest and mildest Peppers.

BELL or BULL NOSE, HOT. (60 days). The earliest of the "bell" type Peppers. The ribs are quite pungent, while the rest of the fruit is mild. The medium sized square fruits are deep green when immature and scarlet when ripe.

BELL or BULL NOSE, SWEET. (60 days). Plant 2½ feet high, medium light green, upright, strong growing, bushy. Fruits 3 by 4 inches, squared, usually four lobes, inverted bell shape; flesh quite thick, mild in flavor and is a good garden strain for salads and stuffing.

RUBY KING. (70 days). Plants are about 2½ feet high, vigorous, compact and productive. Fruits are 4 to 4½ inches long and of deep green color when young, bright red when ripe. The flesh is thick and mild flavored. One of the best varieties for mangoes.

CHINESE GIANT. (80 days). Plant 2½ to 3 feet high, medium light green, strong, bushy growth. Fruit is large, 4 by 5 inches, squared, usually four lobes, deep green to a bright red color. Quite productive with a good thickness of side wall. Sweet and mild in flavor and used for a stuffing type. Very attractive in appearance.

GOLDEN QUEEN. (80 days). Stalk 2 feet; medium dark, heavy growth, very bushy. Fruits medium large, 3 by 4 inches, slightly tapered, mostly four lobes, medium thick wall, dark green to a golden yellow when ripe. Mild in flavor.

HARRIS EARLY GIANT. (65 days). Stalk 2 feet; medium dark with a rather spare leaf growth. Fruits are medium large, 3 by 4 inches, squared, usually four lobes, medium thick side wall, bright cherry-red color. Sweet and mild.

WORLD BEATER. (73 days). Fruits four-lobed, 5 inches long by 3½ inches in diameter; flesh very thick and mild. Very productive and a good shipper.

PIMENTO. (75 days). Plant 2½ feet; medium dark, upright and very bushy. Fruits 2 by 2½ inches, heart-shaped, smooth, without lobes or side ridges, deep green to brightest red. Very sweet and mild and a heavy producer. Excellent canning variety.

BANANA or LONG HOT YELLOW. (70 days). Plant 2½ feet high, medium light green, upright and fairly bushy growth. Fruits long, slim, 1½ by 6 to 7 inches, ranging in color from a deep yellow to a bright orange to a bright red as they ripen, and tapering to a point. Very prolific, early, quite thick walled for the type and hot in flavor.

RED CHILI. (85 days). Plants low growing and bushy. Fruits borne upright, very numerous, 2 to 2½ inches long, ⅜ inch thick, tapered; waxy pale yellowish green, becoming rich red; very pungent.

MAMMOTH LONG CAYENNE. (70 days). A long, slim, pointed pod, bright red in color when ripe, and extremely strong and pungent. Size ¾ to 1 inch in diameter, 5 to 6 inches long.

SMALL or SHORT CAYENNE. (70 days). Same as Mammoth Long Cayenne except in size; ¼ inch in diameter, 1 to 1½ inches long.

ALL PEPPERS PRICED AT: Pkt., 10c; oz., 50c.

Culture. The pods of the Pepper are used in sauces, salads, soups or as a seasoning and the large mild varieties called mangoes are eaten from the hand or variously stuffed and prepared with cabbages, tomatoes or meat. The pods of green peppers are green until in ripening they turn red or yellow, according to the variety. Start pepper in hotbeds, maintaining a temperature of 70 degrees and in other ways treat like a tomato. Set out-of-doors after frosts in 30-inch rows, giving each plant 18 inches in a row. One ounce of seed gives 2,000 plants and one-quarter pound plants an acre. Number of days given are from setting plants to ripe fruit.

Pumpkin

CONNECTICUT FIELD. (120 days). The standard cornfield variety, producing large, orange colored Pumpkins which average 25 pounds in weight, round and flat on ends with smooth, hard rind. Flesh is thick, dry and sweet—excellent for canning and stock feeding.

GREEN STRIPED CUSHAW. (115 days). Fruits very large with crooked neck. Color creamy white, irregularly striped or traced with green. Flesh light yellow, very thick, rather coarse but sweet. Very productive.

LARGE CHEESE or KENTUCKY FIELD. (120 days). Used largely for canning and stock feeding. The fruits are flat, dull orange; flesh yellow, thick and tender.

Culture. The finer varieties of pumpkins are used for pies and the coarser ones for stock feeding. While the Pumpkins may be grown very much as cucumbers are grown in a garden, they are more frequently planted in the field with corn, where several seeds are dropped in each fourth hill. Planted alone, 6 to 10 seeds are covered 1 inch deep in hills 8 to 10 feet apart and thinned to 2 to 4 plants to the hill. One ounce plants 25 hills and 2 to 4 pounds of seed generously plants an acre. Number of days given is from planting to ripe fruit.

ALL PUMPKINS PRICE AT:
Pkt., 10c; oz., 15c; ¼ lb., 35c.



Pie Pumpkin

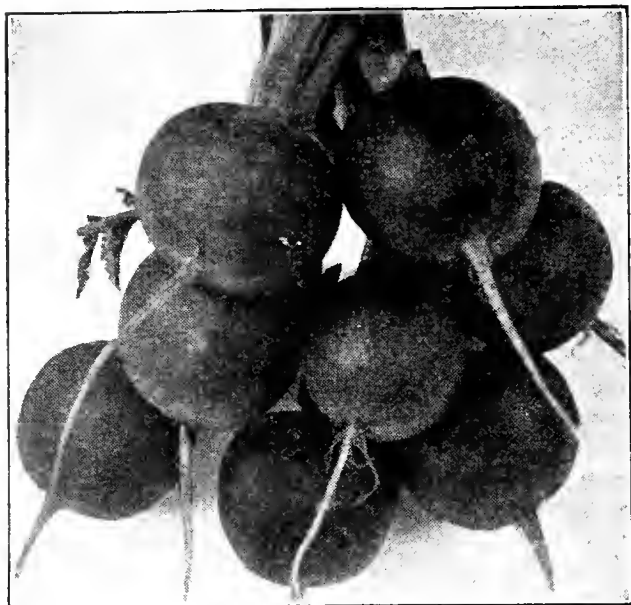
JAPANESE PIE. (115 days). Shaped somewhat like the Cushaws and grows to a large size; skin deep green with dark stripes; flesh deep yellow and of high quality. Seeds sculptured like Chinese letters.

MAMMOTH POTIRON or KING OF THE MAMMOTH. (120 days). The flesh and skin are of a bright golden yellow color, fine grained and of excellent quality. This enormous variety has been grown to weigh 100 pounds.

TENNESSEE SWEET POTATO. (110 days). Fruits are bell-shaped, of medium size, with white skin slightly mottled with light green stripes, averaging 15 pounds in weight. Flesh is creamy white, very thick, fine grained and sweet.

SMALL SUGAR or PIE. (115 days). A rather small but handsome variety. Shape round; skin deep orange colored; flesh fine grained, sweet flavored. Superior for pies. Good home garden variety where space is limited.

Radish



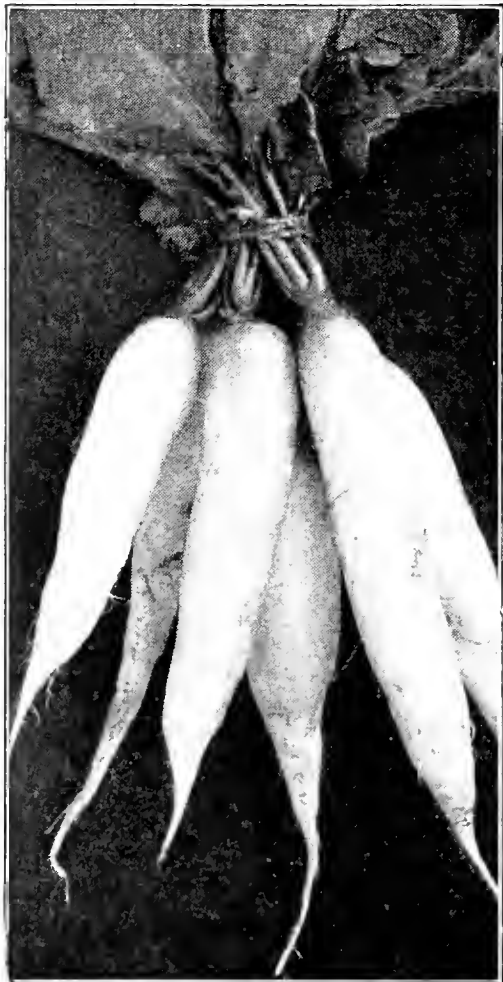
Leonard's Scarlet Globe

EARLY SCARLET GLOBE, SELECTED. (24 days). This excellent, bright, rich scarlet colored, globe-shaped Radish is the finest for forcing as it will bear the heat required for forcing without becoming pithy or losing its excellent flavor. Has a small top and certainly is the variety needed by the gardener who forces for early market. Also an excellent sort for outdoor planting.

WHITE ICICLE. (27 days). Without doubt the finest early white variety and very popular with home gardeners. Tops medium; roots $5\frac{1}{2}$ to 6 inches long, tapering, pure white, very crisp and mild.

WHITE-TIPPED SCARLET TURNIP. (25 days). One of the handsomest of the turnip Radishes and a great favorite in many large markets for early planting outdoors. Roots slightly flattened on the under side; color very deep scarlet with a white tip; flesh white and of the best quality.

FRENCH BREAKFAST. (25 days). Popular home garden and early market variety.



White Icicle

Tops medium small; roots $1\frac{1}{2}$ to 2 inches long, thicker towards bottom, scarlet with white tip; flesh white, crisp and of excellent quality.

IMPROVED CHARTIER. (34 days). Decidedly distinct in appearance, the color at the top being crimson running into pink about the middle and from thence downward it is a pure waxy white. Roots 7 to 8 inches long; flesh crisp and tender.

CINCINNATI MARKET. (28 days). Tops short and small; roots 6 to 7 inches long, pointed, bright scarlet; flesh white, crisp and mild.

CRIMSON GIANT. (30 days). Largest of the round reds. Tops medium small, very upright with medium light, short stem. Roots go up to $1\frac{1}{2}$ inches without being pithy, globe-shaped, deep red color, rather thick skin. Flesh white, tender and crisp.

EARLY SCARLET TURNIP. (26 days). Early variety for forcing or outdoor culture. Tops medium; roots small, turnip-shaped, almost round, bright scarlet in color, crisp and tender.

LONG SCARLET SHORT TOP. (27 days). This bright scarlet, small-topped sort is about 6 inches long, is uniformly straight, smooth, brittle and crisp, an excellent standard variety for garden or market use.

SAXA. (22 days). Principally a forcing sort, but also used for out-of-doors planting. Tops very small; roots small, spherical, $\frac{7}{8}$ inch in diameter, bright scarlet in color; flesh white, crisp and mild.

SPARKLER WHITE-TIPPED. (26 days). Similar to Scarlet Turnip White-Tipped as to size and time of maturity. The root, however, is more round or ball-shaped, and the white extends farther up on Radish.

WHITE STRASBURG. (39 days). Large, showy, half long sort. Roots 5 to 6 inches long, $1\frac{1}{2}$ inches thick at the shoulder, tapering to a point; flesh white, firm and mildly pungent.

WHITE STUTTGART. (41 days). Tops medium large; roots top-shaped, 3 to $3\frac{1}{2}$ inches long, 3 to 4 inches in diameter, white and mildly pungent. Excellent for late summer and for winter storage.

ALL RADISHES PRICED AT: Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c.



French Breakfast

We grow our Radish seed in Michigan where the finest quality Radish seed is produced, selecting only the finest types for planting each year. Our Radish seed is preferred by most of the market gardeners in the Chicago section and we believe our stocks to be the finest on the market. If you are not using Michael-Leonard's Radish seed—try some this year.

Culture. Plant Radishes on a light soil if a choice is possible and every second week for a succession from the time the soil can be worked in spring till the first light frost. Plant in 12- to 18-inch rows, cover the seed one-half inch deep and permit ten radishes to grow to the foot; use 8 to 12 pounds of seed to the acre. Radish seed, which germinates quickly, may be sown with some slow germinating seed so that the cultivation of that crop may begin earlier, or the quicker growing radish may be grown between the rows of some slow growing crop that later requires considerable space. Number of days given is from planting to roots of bunching size.

Radish—Winter Varieties

The winter Radish is sown at late turnip planting time and used in the autumn or stored for winter like the turnip.

WHITE CHINA or CELESTIAL. (60 days). The root is 8 inches long, cylindrical, with beautiful white skin and flesh so white as to attract attention even among the other white varieties. The flesh is very tender and of excellent quality.

LONG BLACK SPANISH. (62 days). One of the best winter varieties. Tops large and heavy; roots 7 to 9 inches long, 2 inches in diameter and tapering to a point; skin black; flesh white, very firm and pungent.

ROUND BLACK SPANISH. (60 days). Roots round, sometimes top-shaped, 3 to 4 inches in diameter; skin black; flesh white, firm, crisp and highly flavored. An excellent sort for winter as the roots keep a long time.

CALIFORNIA MAMMOTH WHITE. (61 days). Large, heavy tops, light green in color. Roots large, 3 by 10 inches, stump-rooted, thickest at the bottom end; small tap root. White skin; white flesh, crisp and hard but rather coarse grained and strongly flavored.

ROSE CHINA WINTER. (53 days). Roots cylindrical or largest at the bottom, tapering abruptly to a small tip; skin very smooth and of a bright rose color; flesh firm, crisp and tender; quite pungent.

ALL RADISHES PRICED AT:

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c.

RHUBARB

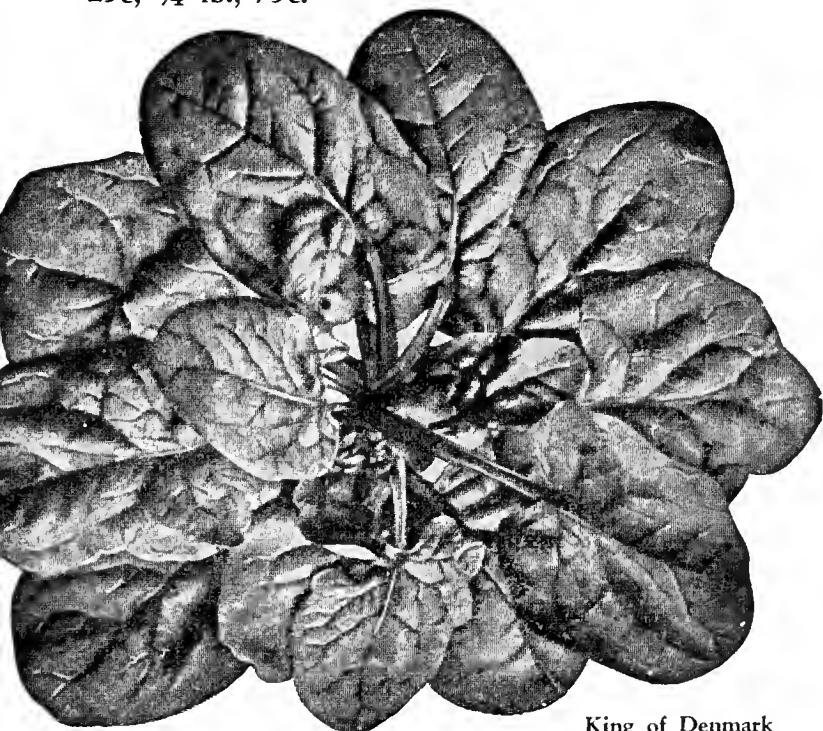
Culture. Rhubarb succeeds best in deep soil. The richer its condition and the deeper it is stirred the better. Sow in drills an inch deep and thin out the plants to 6 inches apart. In the Fall transplant the young plants into very highly manured and deeply stirred soil, setting them 4 to 6 feet apart each way and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year and the plant never allowed to exhaust itself by running to seed.

VICTORIA. Stalks large, rich red in color, very thick and tender. The best variety. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Salsify or Vegetable Oyster

Culture. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnips. The roots are perfectly hardy and may remain out all winter. Store a quantity for winter use in a pit or cellar in damp earth or sand.

MAMMOTH SANDWICH ISLAND. Roots 7 to 8 inches long, 1 to $1\frac{1}{2}$ inches thick; skin almost white; flesh mild and delicately flavored. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.



King of Denmark



Savoy Leaved Bloomsdale

Spinach

Culture. As early as the soil can be worked, sow it one-half inch deep in 14-inch rows, using 1 ounce of seed to 100 feet, and in the second week will appear a tiny plant with two very narrow leaves that do not resemble the true leaves that follow. Cutting should begin 45 days from sowing. It is impossible to put spinach on too rich soil, and nitrate of soda is used on it with profit.

GIANT NOBEL THICK LEAF. (42 days). Plants large, vigorous and slow to run to seed. Very heavy yielder. Leaves medium green, thick and tender. The best thick-leaved variety. Thoroughly dependable and long-lasting. Ideal for the home garden.

NEW ZEALAND. This branching plant—a Spinach in its use but not in its growth—frost-kills but grows luxuriantly in the summer heat. Plant these large seeds three in a hill, 3 by 2 feet apart or start the plant under glass and transplant.

OLD DOMINION (Blight-Resistant). (40 days). A cross between Virginia Blight-Resistant Savoy and King of Denmark. Large, dark green, heavily crumpled leaves. Long standing and resistant to mosaic. Used mostly for an early spring crop.

KING OF DENMARK. (44 days). The best long season Spinach, remaining two weeks longer than others before bolting to seed. Vigorous and spreading; leaves large, rounded, crumpled and blistered, deep green.

JULIANA. (46 days). Plants compact and dense, growing close to the ground; leaves rounded with short stems, thick, crumpled, very dark green. Slow in producing seed stalks.

SAVOY-LEAVED BLOOMSDALE. (39 days). One of the best to plant in autumn for early spring use. Plant of upright growth with narrow, pointed leaves, which are curled like those of the Savoy Cabbage. It grows quickly to size for use but soon runs to seed.

SAVOY BLOOMSDALE BLIGHT-RESISTANT (Virginia Savoy). (39 days). Used principally in sections where blight occurs. Similar to Savoy-Leaved or Bloomsdale, but somewhat smoother in leaf and inclined to bolt to seed earlier.

SAVOY BLOOMSDALE LONG STANDING. (42 days). Similar to the older type but with thicker, rounder, lighter colored leaf. Slow to bolt to seed.

VIKING. (44 days). This new variety is excellent for market gardens and canning. Plant large, spreading, vigorous, long standing and heavily productive. Leaves very large, thick, dark green.

VIROFLAY or THICK LEAF. (43 days). Grows very rapidly, forming a cluster of large, very thick, slightly wrinkled leaves of fine color and quality.

ALL SPINACH PRICED AT:

Pkt., 10c; oz., 15c; lb., 40c.



Leonard's Warty Hubbard

Squash—

SUMMER VARIETIES

GIANT STRAIGHTNECK. (55 days). A distinct improvement on the Crookneck strain as it packs to better advantage for shipping. Popular with market gardeners and shippers. Plant is of bush type; fruits thick-necked, heavily warted, straight, lemon-yellow in color; flesh thick, light yellow. At its best fresh from the home garden.

EARLY WHITE BUSH, SCALLOPED. (55 days). Also called Cympling and White Patty Pan. It is the most popular of the white summer types of Squash. The fruits are rather small, quite flat with ridged or scalloped edges. The vines are extremely prolific and disease resisting. Used when but a few days old they are very tender.

EARLY YELLOW BUSH, SCALLOPED. (55 days). It is similar in all respects to the Early white Bush except in the color of the skin, which is a golden yellow. It is not quite so prolific, nor is it as widely used.

ITALIAN VEGETABLE MARROW. (60 days). A distinct variety of Squash of bush form. Fruit grows to a length of about 20 or more inches, with a diameter of 3 to 4 inches; skin smooth, of a dark green color, marbled with yellow or with paler green. All through Italy, where the Squash is grown, the fruits are eaten when quite young, sometimes even before the flower has opened.

GIANT SUMMER CROOKNECK. (56 days). This strain is a great improvement on the old variety of Crookneck. It is larger and better in every way.

SUMMER CROOKNECK. (50 days). A standard early and productive summer variety. Fruits about a foot long, moderately warted and of a bright yellow color.

SWEET POTATO or DELICATA. (55 days). Early and very prolific; of oblong shape. Ground color orange-yellow splashed and striped with very dark green. Although of small size the Squashes are very solid and heavy while the quality is rich and dry.

Culture. The directions for the planting of cucumbers can be followed with slight modifications for Squash or Cympling. Plant the Summer Squash in hills 4 feet apart and use before mature. Plant the Winter Squash in hills 6 to 8 feet apart; handle without bruising and store in a dry, moderately warm place for winter. Plant the seed generously and thin to 2 or 3 plants to a hill. One ounce of seed plants 25 hills and 2 to 4 pounds plant an acre. The Squash is recommended either for the table or the feed lot. Number of days given is from planting to ripe fruit.

Squash WINTER VARIETIES

WARTY HUBBARD. (100 days). Somewhat larger in size than the well known Hubbard and of equal quality but is more heavily warted and the shell is very dark green, almost black, in color. Our stock of this variety is exceptionally true. Many Chicago home gardeners grow a winter's supply with little trouble.

ACORN, DES MOINES OR TABLE QUEEN. (58 days). A trailing variety producing acorn-shaped fruit with a thin, distinctly ribbed, dark green shell; 6 inches long by 4½ inches in diameter. Flesh light yellow and bakes well. Each fruit makes two nice servings. Convenient for the small family.

ARIKARA. (95 days). Long runner; quite heavy growth. Fruits are spindle shaped and tapered at both ends, medium large, 8x12 inches, smooth, thin, hard shell, pink in color with some stripe and blotch of pale green. Flesh is thick, fine grained, well flavored, quite dry and orange-yellow in color. An excellent winter keeper.

BANANA. (110 days). A prolific, oblong variety, 2½ feet in length by 6 inches in diameter, having a gray-green shell; solid dry flesh and small seed cavity. Rather late in maturing.

BUTTERCUP. (100 days). A fine new Squash of excellent quality, 4½ by 6½ inches in size. The outside color is green with stripes and spots of gray. There is a heart-shaped protruberance at the blossom end. The dry, thick flesh, texture and keeping qualities of this Squash are excellent.

MAMMOTH CHILI. (110 days). Grown for exhibition and stock feeding. Specimens have been grown to weigh 150 pounds. Fruits oblong; skin quite smooth but with broad, open netting and rich orange-yellow color.

DELICIOUS. (105 days). Fruits broad top-shaped, commonly 7 to 8 inches long; skin very dark green, fairly smooth; rind thin but hard; flesh extremely thick, bright yellow, fine grained and dry, without fiber and highest quality.

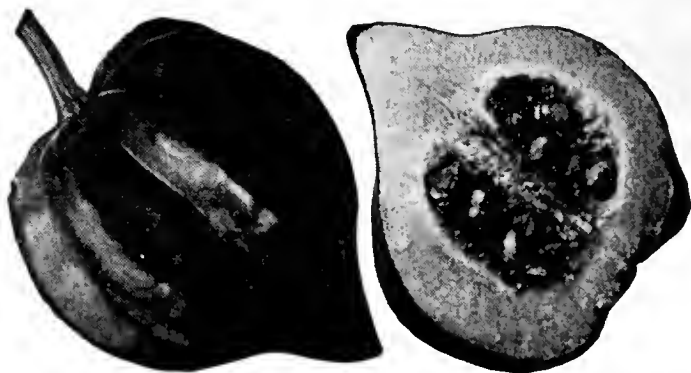
GOLDEN DELICIOUS. (105 days). Valuable for canners because of the high starch content of its flesh and the bright red-orange color of the exterior. In shape, size and season it is practically the same as the original Delicious.

HUBBARD. (100 days). The standard winter Squash. Fruits large, heavy and moderately warted, shell dark bronze-green showing more or less light green markings toward blossom end; flesh bright orange-yellow, fine grained, thick and dry.

BLUE HUBBARD. (110 days). This excellent Squash of the Hubbard type is light blue in color with hard shell and thick, fine grained flesh, which is very tender and by far the best flavored of the winter Squashes. This variety is very popular in the East.

RED OR GOLDEN HUBBARD. (100 days). This is a very distinct sort of the shape and general character of the Hubbard but a little smaller; color rich orange-red instead of the dark olive-green.

ALL SQUASH PRICED AT: Pkt., 10c; oz., 20c; ¼ lb., 40c.

Acorn,
Des Moines or Table Queen

Tomato

We grow the largest part of our Tomato seed in Michigan. Our Tomato seed is saved from choice, ripe select Tomatoes, grown only for seed purposes. **You cannot get any better Tomato seed, no matter how high a price you may pay for it.** We grow Tomato seed for many of the largest seed houses and canning factories throughout the United States.

Culture. The Tomato requires 100 days or more to mature from seed. As Tomatoes are killed by other than light frost, early Tomatoes should be started in hotbeds 2 months before they may be transplanted out-of-doors. Three weeks later these plants may be potted or given a space of 4 by 4 inches in the hotbeds. Before setting in the field, the plants should be gradually exposed to the outside conditions and the quantity of water given them decreased. Transplant on a cloudy day if possible, and water freely. Nitrate of soda may be given each plant at this time with profit. A space of 4 by 4 feet should be given each plant in the field or more for robust varieties, except that where they are carefully pruned and trained, which is unnecessary, they may be planted as close as 2 by 2 feet. One ounce of seed gives 2,000 plants. The number of days given is from setting plants to ripe fruit.

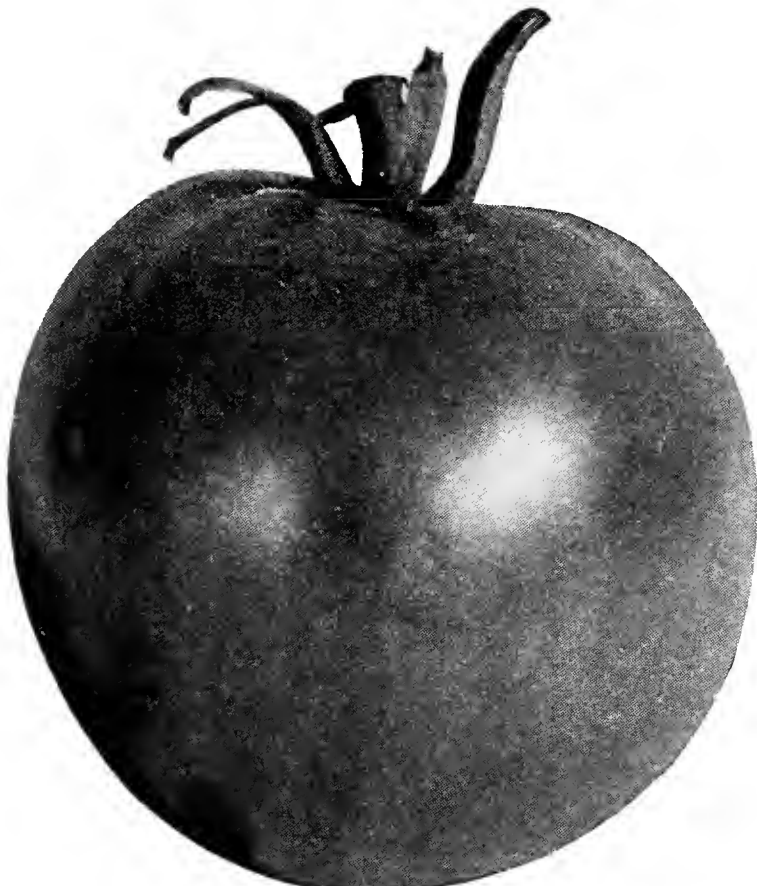
CHALK'S EARLY JEWEL. (76 days). We consider this one of the very best early Tomatoes yet introduced. Vines vigorous and very productive. Fruit deep scarlet-red. Fine for early Tomatoes in the home garden.

PONDEROSA. (87 days). A purplish pink Tomato of largest size. Vigorous grower and very productive; fruit very solid, fairly smooth and of good quality. Chicago's home gardeners like the large, fine fruits.

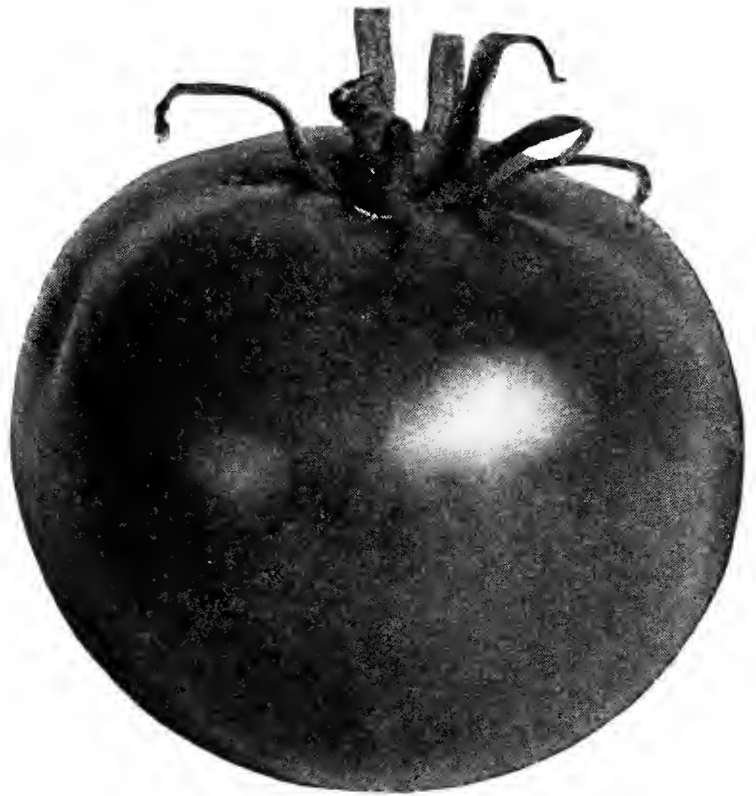
PRITCHARD OR SCARLET TOPPER. (76 days). Wilt-resistant. Fruits large, smooth, globular, solid with thick walls and cross sections; color deep scarlet. Splendid home and market garden variety; excellent for shipping.

MARGLOBE. (80 days). Resistant to nail-head rust and fusarium wilt. Large, perfect globe-shaped fruits of a beautiful scarlet color. Its spreading habit of growth enables it to bear in great abundance.

JUNE PINK. (67 days). Vine makes a very scant leaf growth 2 to 2½ feet tall. Fruit averages 3 inches in diameter, slightly flattened tip and bottom with smooth, thin, tough skin and medium thick wall with five large seed cells. Earliest of the pinks.



Marglobe



Pritchard

JOHN BAER. (73 days). An early red Tomato similar to Chalk's Early Jewel; very productive.

LIVINGSTON'S GLOBE. (82 days). Of beautiful globe shape with quite a percentage of elongated (stem to blossom) fruits, which permits a greater number of slices being taken than with flat fruited sorts. Color a beautiful, glossy rose tinged purple.

GROTHEN'S GLOBE. (73 days). A new, early maturing, wilt-resistant variety which is becoming popular in some sections for shipping. Similar to Break O' Day, but the fruits are of deeper scarlet and are free from objectionable yellow about the stem end.

BONNY BEST. (75 days). Vines strong and vigorous; fruit deep scarlet, ripening to stem; flesh firm. A productive and very desirable early and main crop variety.

RUTGERS. (72 days). A recent development introduced by the New Jersey Agricultural Experiment Station. Fruits medium to large, similar in shape to Marglobe but slightly more flattened. Highly recommended as a second early maturing variety for canning and Tomato juice.

BEAUTY. (84 days). Vines large and heavy; fruits large, solid, smooth, purplish-pink. One of the most popular large purple Tomatoes.

GREATER BALTIMORE. (83 days). Particularly valuable for canning; heavily productive. Fruits deep scarlet-red, large, deep but flat, smooth, very firm and solid.

BREAK O' DAY. (71 days). A wilt-resistant Tomato that is nearly as early as Earliana and as productive as Marglobe. Its fruits are large, smooth, red, and globular; very similar to Marglobe but usually larger. Used cold for salads or stuffed.

BRIMMER. (91 days). Similar to Ponderosa but larger, a single specimen often weighing 3 pounds. Fruit solid and meaty, massive in size, delicious flavor, rich, dark color, and almost seedless.

ACME. (84 days). Popular bright pink shipping Tomato. Fruits solid, set in clusters.

ALL TOMATOES PRICED AT:
Pkt., 10c; oz., 35c; ¼ lb., \$1.25.

Tomato—Continued

DWARF CHAMPION. (87 days). A purplish pink variety forming a strong, erect bushy plant 2 feet high. Often sold as a tree Tomato. Fruit smooth, medium sized, fairly solid and of good flavor.

DWARF STONE. (85 days). Strictly dwarf and tree-like. Fruits bright red, flattened globe shape, a trifle over medium size.

EARLIANA. (65 days). A very popular early home garden variety. Fruits flattened, medium in size, deep scarlet-red, firm and fairly smooth.

EARLY BALTIMORE. Illinois University selection of Marglobe, thriving on all soils; smaller fruit, solid bright color, heavier yielder.

EARLY DETROIT. (82 days). Vines vigorous and productive. Fruit round and nearly globe-shaped, firm and purplish pink in color. A splendid second early variety.

GOLDEN QUEEN. (82 days). Fruits large and smooth of beautiful golden yellow, sometimes with a slight blush of red, as smooth and well shaped as the best of the red varieties and of superior flavor.

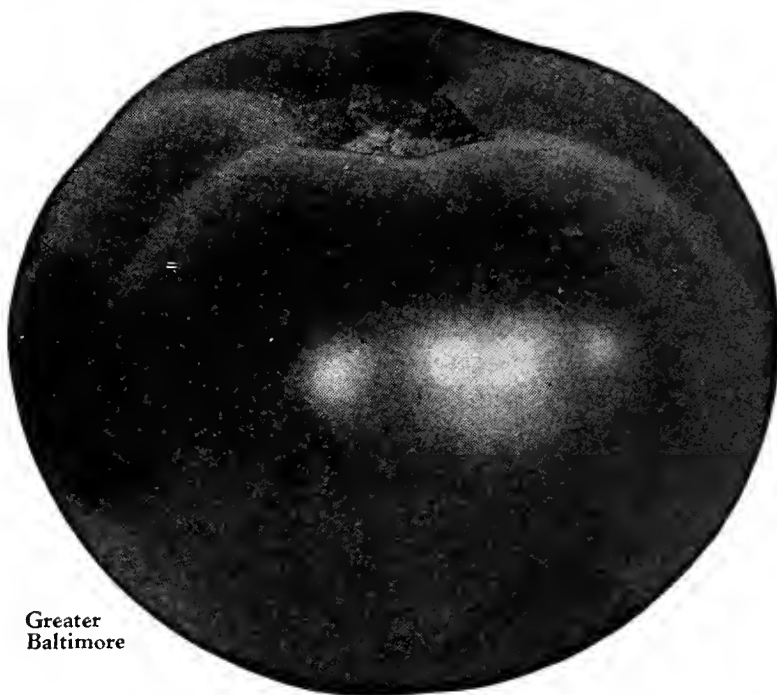
GULF STATE MARKET. (81 days). The best of the early purple fruited varieties. In season with Early Detroit, while the fruit is larger, smoother, more globe shaped, very solid, free from cracking and productive.

McGEE. (83 days). Very productive, average size and bright crimson. Solid and of excellent flavor.

RED HEAD. (74 days). An exceptionally fine, large bright red variety. Fruit almost globe shaped, very solid. An excellent variety for the market gardener.

NEW STONE. (84 days). Vines vigorous and productive; fruits large, smooth, solid and deep red in color, very heavy. This is a favorite canner's variety.

NORTON, WILT-RESISTANT. (87 days). Similar to Stone but bred for its resistance to fusarium wilt; possibly a trifle later than Stone.



Greater
Baltimore

YELLOW OR GOLDEN PONDEROSA. (90 days). Vines large and heavy; fruits very large, flat, deep yellow. A fine home garden variety.

BEEFSTEAK OR CRIMSON CUSHION. (90 days). A wilt-resistant, late, main crop variety for home and market garden use. Plant open in habit of growth, heavy, rather light green, vigorous. Fruits large, flat, scarlet, rather smooth.

BISON. (65 days). Small, spreading, open growth with few leaves, 2 feet tall. Fruits medium small, 2 inches in diameter, flattened top globe. Bright red color; thin, tender skin, thin side wall, quite large seed cells, very juicy. Fruits set mostly at one time and are bunched around base of vine.

ALL TOMATOES PRICED AT:
Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Small Fruited Varieties

YELLOW PEAR

YELLOW PLUM

RED PEAR

YELLOW HUSK OR GROUND CHERRY

PRICES OF SMALL FRUITED VARIETIES:
Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

Rutabaga

Culture. Rutabaga, or Swedish Turnip, with their superior keeping qualities, had best be drilled a month earlier than other turnips, given 18- to 30-inch rows and thinned to stand 6 to 12 inches apart in the row.

AMERICAN PURPLE TOP, IMPROVED. (90 days).

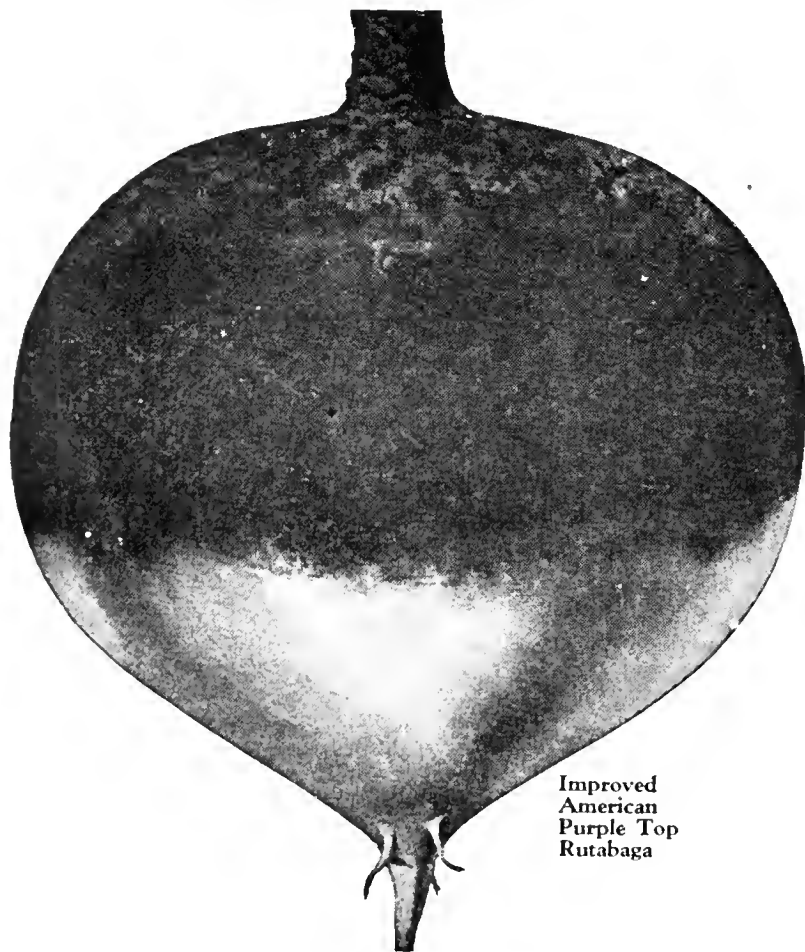
Tops large, upright; roots 5 to 6 inches, yellow with purple top; flesh pale yellow, fine grained, sweet and tender.

MONARCH OR TANKARD. (90 days). This is a yellow fleshed sort having very large tankard-shaped roots with relatively small necks and tops. Color purplish crimson above ground, yellow below; flesh fine grained, very solid and of the best flavor.

SWEET GERMAN. (90 days). Roots 4 to 5 inches, white with green tinted top, globe-shaped; flesh pure white, fine grained and sweet. Good for table use or stock feed.

MACOMBER. A very fine white Rutabaga.

ALL RUTABAGAS PRICED AT:
Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c.



Improved
American
Purple Top
Rutabaga

Turnip

PURPLE TOP WHITE GLOBE. (60 days). An early, perfectly globe-shaped variety of good size and very attractive appearance. The roots are large, white with purple top. The flesh is white, fine grained and tender. They are best for table when about 3 inches in diameter, but can be grown much larger for stock feeding. Best variety for market gardeners.

WHITE EGG. (50 days). Top medium size, upright; roots white, egg-shaped with small tap root, 2½ to 3 inches. Good home garden variety.

SEVEN TOP FOR TURNIP GREEN. Standard, extremely hardy foliage Turnip for table and forage use. Root woody and inedible; crown sends up numerous leafy shoots which are excellent for greens and for stock to graze on. Fresh from your garden, they are a treat for the gods.

SHOGIN OR JAPANESE FOLIAGE. Very popular in the South. Quick growing. Tops 18 to 20 inches tall, bright green, strap-leaved; roots globular, smooth, white and of excellent quality. Louse proof.

SOUTHERN PRIZE. Foliage type with tops much like Seven Top and used for same purpose. Makes a large, top-shaped root of poor quality.

AMBER GLOBE. (75 days). One of the best varieties for a field crop for stock. Flesh yellow, fine grained and sweet; color of skin yellow with green top. Hardy, keeps well; a good cropper. Very popular in the South.

COW HORN OR LONG WHITE. (68 days). This variety is pure white except for a little shade of green at the top. It is carrot-like in form, growing nearly half out of the ground and slightly crooked.

EARLY SNOWBALL. (43 days). Medium large, light green tops. Roots are 3 to 4 inches, perfect globe shape; a fine tap root; pure white colored skin and flesh. Flesh fine grained and sweet. Good table type.

EXTRA EARLY PURPLE MILAN. (40 days). Tops medium, upright growing, strap leaved; roots 3 inches, white with purple top, very flat; flesh sweet and crisp. Recommended for early spring planting.

GOLDEN BALL OR ORANGE JELLY. (60 days). Undoubtedly one of the most delicate and sweetest yellow fleshed Turnips. Not of a large size but firm, hard and of most excellent flavor. Keeps well and is superior as a table variety.

EXTRA EARLY WHITE MILAN. (40 days). Tops small and upright; roots 3 inches, pure white, very flat; flesh sweet and crisp. Used for forcing or early spring planting outdoors. Very early.

POMERANIAN OR LARGE WHITE GLOBE. (75 days). This is one of the most productive kinds and in good, rich soil will frequently grow to 10 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves large and dark green.

PURPLE TOP STRAP LEAF. (45 days). Tops medium large, upright, strap leaved. Roots 3 to 4 inches, flat, white with purple top. Flesh white, fine grained, and sweet. Early variety.

WHITE FLAT DUTCH, STRAP LEAF. (42 days). Tops small, light green, strap leaved; roots white, 3 to 4 inches, flat, fine grained and sweet. Excellent for early planting.

YELLOW ABERDEEN, PURPLE TOP. (75 days). Very hardy and productive, a good keeper; globe shaped. Color pale yellow with purple top. Very firm in texture and closely resembling the Rutabaga in good keeping qualities. Good either for table or stock.

YELLOW GLOBE. (75 days). Tops large, upright; roots 4 to 5 inches, globe-shaped, pale yellow; flesh firm, pale yellow.

ALL TURNIPS PRICED AT:

Pkt., 10c; oz., 15c; ¼ lb., 30c.

Culture. While the main crop of Turnips is planted in July, more Turnips should be grown in early spring. Seed may be broadcast on the few soils free of weeds, but it is more advisable to sow in 1- or 2-ft. drills, cover less than one-half inch and thin to stand 6 inches apart in the row. Use 1 ounce of seed to 100 feet of row and 2 pounds to the acre. The Turnip requires one-half more seed when broadcast than in drills and a salad Turnip requires one-half more seed than the Turnip sown as a root crop.

Herbs

Culture. In borders and irregular parts of the garden it will prove profitable to grow a few Herbs. Their use gives new and unusual flavors, pleasing aromas and perfumes and some medicines that are as serviceable as can be purchased. Exact cultural directions suited to them all is impossible. Give them generally the care given vegetables or flowers. Where the foliage is to be used, cut the young stems on a dry day, wilt in the sun, dry in the shade and either hang up the bunches or store in air-tight glass jars.

ANISE. A hardy annual used for medicinal purposes and for seasoning and flavoring.

BASIL, SWEET. An annual used for seasoning sauces, soups, and meats.

CARAWAY. In its second year this biennial produces seed for flavoring pastry, etc.

CORIANDER. An annual grown for the use of its seeds in confectionery and liquors.

DILL, MAMMOTH. Plant 2 to 2½ feet high, with leaves cut into thread-like segments. Seed very flat, having strong, bitter flavor. Used for flavoring pickles.

SWEET MARJORAM. Treated as an annual and the younger foliage used for seasoning.

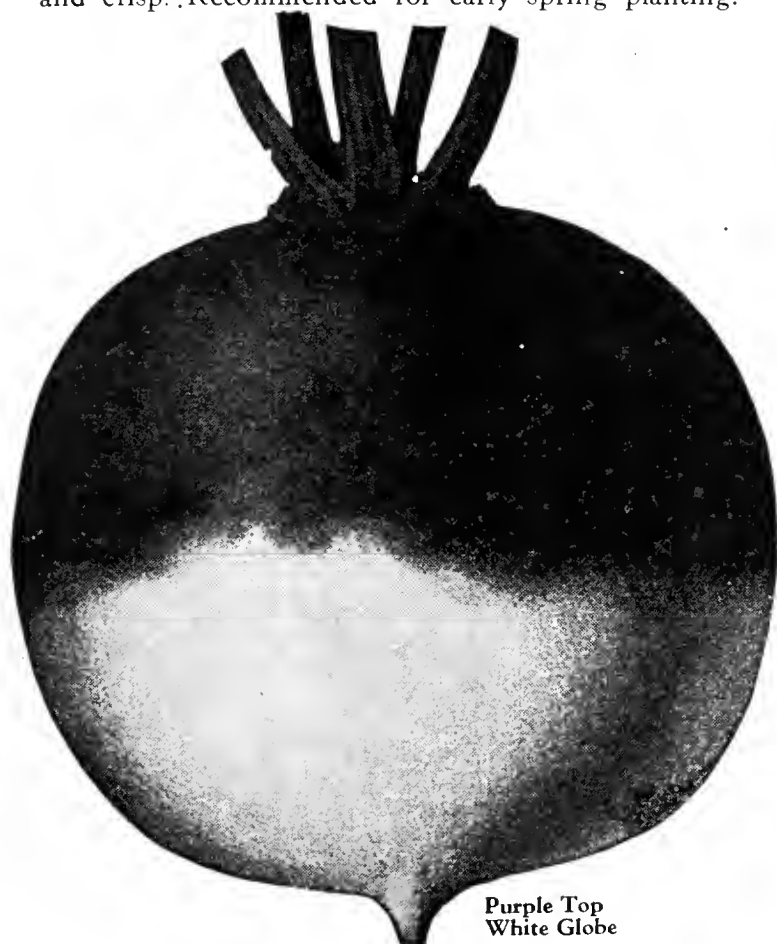
SAGE. Well known, hardy perennial used for seasoning.

SORREL, LARGE LEAVED FRENCH. Standard home garden and market sort, producing large, thick, bright green arrow-shaped leaves of mildly acid flavor.

SUMMER SAVORY. The foliage and flowers of this annual used for flavoring and seasoning.

THYME. The leaves of this perennial are used for seasoning and medicinally.

PRICES OF ALL HERBS: Pkt., 10c.



Purple Top
White Globe

Choice Flower Seed

Most flowers are as easy to grow as vegetables. The same practices that promote the growth of grains, vegetables and fruit apply to flowers. The same fertilizer it is well to use generously. Practically all flowers stand transplanting. Window boxes or hotbeds are good places in which to cradle the baby plants. The stored energy of seed is often somewhat in proportion to the seed's thickness, not its size. Cover the seed four times its least diameter. Drained, moist, warm, mellow soil should be the flowers' home; not soil that is wet or soil that bakes. True, there are plants that are difficult to grow, but these plants are few and respond to what we know to be ideal conditions for plants.

Flowers fall readily into three classes:

Annuals bloom, mature, seed and die the first year.

Biennials bloom and die in their second year; some of them give us bloom in the first year.

Perennials flower for several years and some of them may bloom in the first year of their existence.

ACROCLINIUM (Strawflower), Double Mixed. Pkt., 10c; 1/4 oz., 30c.

AGERATUM mexicanum (Floss Flower), Mixed. Pkt., 10c; 1/4 oz., 25c.

Blue Ball. Pkt., 10c; 1/4 oz., 30c.

AILANTHUS (Tree of Heaven). Pkt., 10c; 1/4 oz., 25c.

ALYSSUM, Sweet. For edging. Pkt., 10c; 1/2 oz., 25c; oz., 40c.

Little Gem. Dwarf. Pkt., 10c; 1/4 oz., 25c; oz., 75c.

Lilac Queen. Pkt., 10c; 1/4 oz., 25c; oz., 75c.

AMARANTHUS caudatus (Love-Lies-Bleeding). Pkt., 10c; oz., 25c.

Salicifolius (Willow-Leaved). Pkt., 10c; 1/4 oz., 40c.

Tricolor (Joseph's Coat). Pkt., 10c; 1/4 oz., 30c.

AMPELOPSIS Veitchi (Boston Ivy). Hardy climber. Pkt., 10c; 1/2 oz., 30c; oz., 50c.

ANTIRRHINUM (Snapdragon). Snapdragons have become immensely popular.

Tall Large Flowered, Finest Mixed. Pkt., 10c; 1/4 oz., 25c; oz., 75c.

Dwarf Mixed. Pkt., 10c; 1/4 oz., 25c; oz., 75c.

Rust-Proof University of California Mixed. Pkt., 10c; 1/8 oz., 25c.

AQUILEGIA (Columbine), Single Mixed. Pkt., 10c; 1/4 oz., 30c.

Dbl. Mixed. Pkt., 10c; 1/4 oz., 30c.

Coerulea, (Rocky Mountain Columbine). Pkt., 20c; 1/4 oz., 75c.

ARCTOTIS grandis (African Lilac Daisy). Pkt., 10c; 1/4 oz., 30c.

WILT-RESISTANT ASTERS

We now have wilt-resistant strains of most varieties we offer and have eliminated the older types from our stocks. You will be pleased with results from our Wilt-Resistant Asters.

QUEEN OF THE MARKET.

These well known early flowering Asters are of a branching habit, about 18 inches high, and one of the most useful types for early market purposes.

Dark Blue, Flesh-Pink, Light Blue, Rose, Scarlet, White. The above colors all priced at: Pkt., 10c; 1/4 oz., 50c.

Finest Mixed. Pkt., 10c; 1/4 oz., 45c.

GIANT COMET or CREGO.

Plants robust, about 2 feet high. Flowers large, double and well formed, making a fine variety for all purposes.

White, Pink, Crimson, Azure-Blue, Deep Rose, Purple, Rose-Pink. The above colors all priced at: Pkt., 10c; 1/4 oz., 50c.

Finest Mixed. Pkt., 10c; 1/4 oz., 45c.

AMERICAN BRANCHING. Plants 2 1/2 to 3 feet high, branching, robust habit. Flower large and double, no single flowers.

Azure-Blue, Crimson, Purple, Deep Rose, Rose-Pink, Sensation (brilliant dark red), White. The above colors all priced at: Pkt., 10c; 1/4 oz., 50c.

Finest Mixed. Pkt., 10c; 1/4 oz., 45c.

HEART OF FRANCE. Rich dark red. Pkt., 10c; 1/4 oz., 75c.

ALL VARIETIES MIXED. Pkt., 10c; 1/4 oz., 40c.

ASTER, Giant California Sunshine. Pkt., 10c; 1/4 oz., 50c.

BALLOON VINE (Love-in-a-Puff). Pkt., 10c; oz., 25c.

BALSAM (Lady Slipper), Double Camellia-Flowered Mixed. Pkt., 10c; 1/4 oz., 25c.

Tall Double Mixed. Pkt., 10c; 1/4 oz., 20c.

BALSAM PEAR (Momordica charantia). Pkt., 10c; 1/4 oz., 50c.

BELLIS (Double Daisy).

Choice Mixed. Pkt., 10c; 1/4 oz., 50c.

BRACHYCOME (Swan River Daisy). Mixed. Pkt., 10c; 1/4 oz., 30c.

CALENDULA (Pot Marigold). Double Orange King. Pkt., 10c; oz., 30c.

Mixed Varieties. Pkt., 10c; oz., 30c.

CALLIOPSIS (Tickseed), Drummond's, Golden Wave. Pkt., 10c; 1/4 oz., 20c.

Mixed. Pkt., 10c; 1/4 oz., 20c.

CAMPANULA medium (Canterbury Bells). Single Mixed. Pkt., 10c; 1/4 oz., 50c.

CAMPANULA, Annual Canterbury Bells. Pkt., 10c; 1/4 oz., 40c.

Cup and Saucer. Pkt., 10c; 1/4 oz., 50c.

CANARY BIRD VINE. Pkt., 10c; oz., 45c.

CANDYTUFT (Iberis).

Showy, branching plants 12 to 15 inches high and bearing in profusion terminal clusters of beautiful single cruciform flowers in a wide range of colors. Considered indispensable for cutting and very effective in beds, masses or rockeries.

Coronaria, Empress White. Pkt., 10c; 1/2 oz., 30c.

Umbellata, Finest Mixed. Pkt., 10c; 1/2 oz., 25c.

CARDINAL CLIMBER (Ipomoea quamoclit). Pkt., 10c; 1/2 oz., 50c.

CARNATION, Margaret, Mixed. Pkt., 10c; 1/4 oz., 40c.

CELOSIA cristata (Cockscomb), Finest Mixed Dwarf. Pkt., 10c; 1/4 oz., 50c.

Tall Mixed. Pkt., 10c; 1/4 oz., 25c.

CELOSIA Childsi (Chinese Woolflower). Pkt., 10c; 1/4 oz., 50c.

CENTAUREA cyanus (Double Cornflower).

These are also known as Bachelor's Buttons, Blue Bottle, and Ragged Sailor. A showy hardy annual succeeding well in any soil, and bearing a profusion of flowers in shades of pink, blue and purple. 3 feet.

Double, Finest Mixed. Pkt., 10c; oz., 40c.

Single, Mixed. Pkt., 10c; oz., 30c.

Double Blue. Pkt., 10c; oz., 45c.

CENTAUREA imperialis (Sweet Sultan). Mixed. Pkt., 10c; oz., 50c.

CENTAUREA candidissima (Dusty Miller). Pkt., 10c; 1/8 oz., 40c.

CHRYSANTHEMUM carinatum, Single Tricolor. Pkt., 10c; oz., 40c.

Coronarium, Double, Mixed. Pkt., 10c; oz., 30c.

CLARKIA elegans, Double, Mixed. Pkt., 10c; 1/4 oz., 40c.

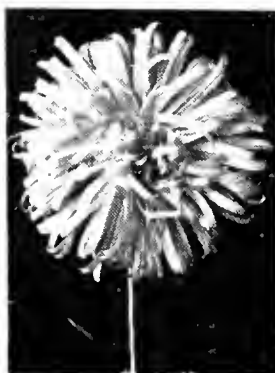
Single, Mixed. Pkt., 10c; 1/4 oz., 30c.

COBAEA scandens. Pkt., 10c; 1/4 oz., 25c.

COREOPSIS lanceolata grandiflora. Pkt., 10c; 1/4 oz., 20c.



Ageratum, Blue Ball



Giant Crego Aster



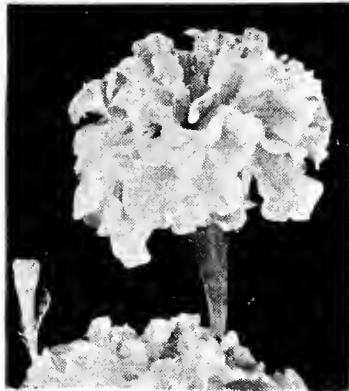
Centaurea Cyanus
(Bachelor Button)



Cosmos, Orange Flare



Lobelia, Crystal Palace



Marigold, Guinea Gold



Petunia, Rosy Morn

COSMOS.

Few flowers have undergone greater improvement within recent years than the Cosmos. This is due, perhaps, to the fact that they are in such great demand for cut flowers.

Extra Early Mammoth Flowering, Mixed. Pkt., 10c; 1/4 oz., 15c.

Late, Mixed. Pkt., 10c; 1/4 oz., 15c.

Double Crested, Mixed, Early. Pkt., 10c; 1/4 oz., 60c.

Orange Flare. Pkt., 10c; 1/8 oz., 40c.

CYPRESS VINE (*Ipomoea quamoclit*). **Mixed.** Pkt., 10c; oz., 30c.

DAISY, SHASTA, Alaska. Pkt., 10c; 1/4 oz., 50c.

DELPHINIUM (Perennial Larkspur).

Hybridum, Fine Mixed. Pkt., 10c; 1/4 oz., 50c.

Belladonna, Hybrids. Pkt., 10c; 1/4 oz., 75c.

Hollyhock Strain, Mixed. Pkt., 15c.

DIANTHUS (Pinks).

Chinensis, Double, Mixed. Pkt., 10c; 1/4 oz., 25c.

Heddewigi, Finest Single, Mixed. Pkt., 10c; 1/4 oz., 25c.

Heddewigi, Finest Double, Mixed. Pkt., 10c; 1/4 oz., 30c.

DIDISCUS (Blue Lace Flower). Pkt., 10c; 1/4 oz., 50c.

DIMORPHOTHECA (African Daisy), *aurantiaca*, **Golden West.** Pkt., 10c; 1/4 oz., 40c.

ESCHSCHOLTZIA, **Double, Yellow and White Mixed.** Pkt., 10c; 1/2 oz., 25c.

ESCHSCHOLTZIA (California Poppy). **Finest Mixed.** Pkt., 10c; 1/2 oz., 25c.

EUPHORBIA (Snow-on-the-Mountain). Pkt., 10c; 1/4 oz., 20c.

FOXGLOVE (*Digitalis*), **grandiflora, Finest Mixed.** Pkt., 10c; 1/4 oz., 35c.

GAILLARDIA (Blanket Flower). **Grandiflora, Finest Mixed.** Pkt., 10c; 1/4 oz., 30c.

Picta, Annual, Double, Mixed. Pkt., 10c; 1/4 oz., 25c.

Picta, Annual, Single, Mixed. Pkt., 10c; 1/4 oz., 25c.

GLOBE AMARANTH (*Gomphrena*). Pkt., 10c; oz., 35c.

GOURDS. Ornamental and useful. **Dipper, Calabash, Hercules Club, Sugar Trough, Japanese Nest egg, Mixed Varieties.** The above varieties priced at: Pkt., 10c; oz., 30c.

GYPSOPHILA (Baby's Breath). **Elegans alba.** Pkt., 10c; oz., 25c.

HELICHRYSUM (Strawflower). **Monstrosum, Finest Mixed.** Pkt., 10c; 1/4 oz., 25c.

HOLLYHOCKS, *Allegheny*, **Finest Mixed.** Pkt., 10c; 1/4 oz., 40c.

Annual Single, Finest Mixed. Pkt., 10c; 1/4 oz., 30c.

Choice Semi-Double, Mixed. Pkt., 10c; 1/4 oz., 50c.

HYACINTH BEAN (*Dolichos*). **Mixed.** Pkt., 10c; oz., 25c.

ICE PLANT (*Mesembryanthemum crystallinum*). Pkt., 10c; 1/4 oz., 20c.

IPOMOEA (Japanese Morning Glory), **Imperialis, Mixed.** Pkt., 10c; oz., 25c; 1/4 lb., 50c.

Moonflower. **White-seeded.** Pkt., 10c; oz., 50c.

JOB'S TEARS (*Coix lachrymae*). Pkt., 10c; oz., 20c.

KOCHIA Childsi (Summer Cypress). Pkt., 10c; oz., 25c.

LARKSPUR

The Larkspur with its long clustered spikes of beautiful irregular flowers, often with long spurs, is especially valuable for its shades of blue.

Dwarf Mixed, Double. Pkt., 10c; 1/4 oz., 25c.

All Sorts Mixed. Pkt., 10c; 1/4 oz., 25c.

Tall Double Stock-Flowered Mixed. Pkt., 10c; 1/4 oz., 20c.

LINUM (Scarlet Flax), **grandiflorum rubrum.** Pkt., 10c; 1/2 oz., 20c.

LOBELIA

The annual Lobelias are plants of dwarf growth, 4 to 6 inches in height, covered with numerous small starlike flowers. The plants will bloom continuously from June until frost.

Mixed. Pkt., 10c; 1/8 oz., 25c.

Crystal Palace compacta. Pkt., 10c; 1/4 oz., 65c.

Pendula, Sapphire. Deep blue. Pkt., 10c; 1/4 oz., 75c.

LUNARIA (Honesty or Money Plant). Pkt., 10c; 1/4 oz., 30c.

LUPINS, Annual Mixed. Pkt., 10c; 1/2 oz., 25c.

Polyphyllus, Perennial Mixed. Pkt., 10c; 1/2 oz., 25c.

MARIGOLD, African, Tall Double, Finest Mixed. Pkt., 10c; 1/2 oz., 40c.

French, Tall Double, Finest Mixed. Pkt., 10c; 1/2 oz., 40c.

French, Dwarf Double, Finest Mixed. Pkt., 10c; 1/2 oz., 40c.

Guinea Gold. Pkt., 10c; 1/4 oz., 40c.

MARVEL OF PERU (Four O'clock). **All Colors Mixed.** Pkt., 10c; oz., 25c; 1/4 lb., 50c.

MIGNONETTE, *odorata grandiflora*. Pkt., 10c; 1/4 oz., 15c.

Special Mixture Large Flowering Sorts. Pkt., 10c; 1/4 oz., 15c.

Machet. Dwarf. One of the best. Pkt., 10c; 1/4 oz., 30c.

MORNING GLORY (*Convolvulus major*). **Mixed.** Pkt., 10c; oz., 20c; 1/4 lb., 45c.

Giant Japanese. (See *Ipomoea*).

Heavenly Blue. Grand annual climber. Pkt., 10c; 1/4 oz., 30c.

MYOSOTIS (Forget-me-not). **Alpestris, Mixed.** Pkt., 10c; 1/4 oz., 30c.

NASTURTIUM, Golden Gleam. Double, sweet scented. Pkt., 10c; oz., 20c; 1/4 lb., 50c.

Double Glorious Gleam Hybrids. Pkt., 10c; oz., 25c; 1/4 lb., 60c.

Scarlet Gleam. Pkt., 10c; oz., 20c; 1/4 lb., 50c.

Tall Finest Mixed. Pkt., 10c; oz., 15c; 1/4 lb., 40c.

Dwarf Finest Mixed. Pkt., 10c; oz., 15c; 1/4 lb., 40c.

NICOTIANA (Sweet Scented Tobacco Plant). **Affinis, Choice Mixed.** Pkt., 10c; oz., 45c.

NIGELLA damascena (Love-in-a-Mist). **Choice Mixed.** Pkt., 10c; 1/4 oz., 15c.

PANSY, Masterpiece. Giant frilled. Pkt., 25c; 1/8 oz., 60c.

Bugnot's Large Blotched. Extra choice. Pkt., 25c; 1/8 oz., 60c.

Trimardeau, Giant Flowered Mixed. Pkt., 15c; 1/8 oz., 25c.

Swiss Giant, Mixed. Pkt., 25c; 1/8 oz., \$1.00.

PETUNIAS

For outdoor planting, porch or window boxes, few plants equal the Petunia. They commence flowering early and continue to bloom until killed by frost; easily cultivated, only requiring a good soil and sunny position. Sow indoors and transplant to the open in May. The bedding kinds can be sown out-of-doors in May.

Hybrida Special Mixed. Pkt., 10c; 1/4 oz., 40c.

Hybrida Scarlet, Blue, White, Striped and Blotched. Any one, Pkt., 10c; 1/4 oz., 40c.

Balcony Type, Mixed. Pkt., 20c; 1/8 oz., 60c.



Portulaca, Single



Spencer Sweet Peas



Dahlia-Flowered Zinnia

PETUNIA—Continued

Grandiflora Single Fringed, Mixed. Pkt., 25c.

Rosy Morn. Pink, white throat; fine for beds. Pkt., 20c; 1/8 oz., 50c.

Rose of Heaven. Rich rose. Pkt., 20c; 1/8 oz., 50c.

Large Flowering Double, Mixed. Very choice. Pkt., 25c.

PHLOX Drummondii, Choice Mixed. Pkt., 10c; 1/4 oz., 25c.

Star Mixed. Pkt., 10c; 1/4 oz., 30c.

PHYSALIS Francheti (Lantern Plant). Pkt., 10c; 1/4 oz., 50c.

POPPY

Showy, large, brilliant colored flowers, growing freely in any garden soil. Produce a fine effect in clumps or beds.

Double Carnation-Flowered, Finest Mixed. Pkt., 10c; oz., 35c.

Double Peony-Flowered, Finest Mixed. Pkt., 10c; oz., 30c.

Double Shirley, Eldorado, Finest Mixed. Pkt., 10c; 1/4 oz., 25c.

Single Shirley, Finest Mixed. Pkt., 10c; oz., 30c.

Tall Single, Annual, Mixed. Pkt., 10c; oz., 30c.

Dwarf Single, Annual, Mixed. Pkt., 10c; oz., 30c.

Oriente, Choice Mixed. Pkt., 15c; 1/4 oz., 50c.

Iceland, All Colors Mixed. Pkt., 10c; 1/4 oz., 50c.

PORTULACA (Moss Rose)

Brilliant garden annuals, 6 inches high, luxuriating in warm, dry, sunny situations and blooming profusely from early summer to autumn. For low beds and masses of color, from spring until frost, they are indispensable; colors range through innumerable shades of red, yellow, pink, white, striped, etc.

Double, Fine Mixed. Pkt., 15c; 1/8 oz., 40c; oz., \$2.50.

Single, Fine Mixed. Pkt., 10c; 1/4 oz., 25c; oz., 80c.

RICINUS (Castor Oil Plant), zanzibariensis, Finest Mixed. Pkt., 10c; oz., 20c; 1/4 lb., 50c.

Mixed. Pkt., 10c; oz., 20c; 1/4 lb., 50c.

SALPIGLOSSIS Finest Mixed. Pkt., 10c; 1/4 oz., 40c.

SALVIA splendens (Scarlet Sage). Pkt., 15c; 1/8 oz., 35c.

Bonfire. Pkt., 15c; 1/8 oz., 40c.

Fireball. Pkt., 15c; 1/8 oz., 40c.

SCABIOSA (Mourning Bride; Pin-cushion Flower). Tall Double, Mixed. Pkt., 10c; 1/4 oz., 25c.

STATICE latifolia. Pkt., 10c; 1/4 oz., 40c.

STOCKS, Large Flowering Dwarf Ten Weeks, Finest Mixed. Pkt., 10c; 1/8 oz., 25c.

Mammoth Early Branching Mixed. Pkt., 10c; 1/8 oz., 30c.

SUNFLOWER (Helianthus), Dwarf Chrysanthemum-Flowered Mixed. Pkt., 10c; oz., 40c.

Mammoth Russian. Oz., 10c; 1/4 lb., 20c; lb., 45c.

SWEET WILLIAM, Single, Mixed. Pkt., 10c; 1/4 oz., 30c.

Dbl., Mixed. Pkt., 10c; 1/4 oz., 40c.

Annual, Finest Mixed. Pkt., 10c; 1/4 oz., 40c.

SWEET PEAS, Spencer Varieties, Mixed. Pkt., 10c; oz., 25c; 1/4 lb., 60c; lb., \$1.90.

Named Varieties. Pkt., 10c; oz., 25c; 1/4 lb., 75c; lb., \$2.50.

VERBENA, Mammoth Scarlet. Pkt., 10c; 1/4 oz., 60c.

Choice Mixed. Pkt., 10c; 1/4 oz., 40c.

VINCA (Periwinkle) alba. Pure white. Pkt., 10c; 1/2 oz., 50c.

Rosea. Pkt., 10c; 1/2 oz., 50c.

Mixed. Pkt., 10c; 1/2 oz., 45c.

WALLFLOWER, Single, Mixed.

Pkt., 10c; 1/4 oz., 20c.

Double, Mixed. Pkt., 10c; 1/8 oz., 50c.

WILD FLOWER GARDEN, Mixed. Pkt., 10c; oz., 20c; 1/4 lb., 50c.

WILD CUCUMBER. Pkt., 10c; oz., 20c; 1/4 lb., 45c.

ZINNIAS

This old garden favorite has been much improved and the fine strain of giant-flowered varieties and other remarkable new forms are taking place in our flower gardens. Zinnias grow well and bloom freely even under the most adverse circumstances of location and weather, and may be counted upon for a continuous show of blooms from July until frost.

CALIFORNIA GIANTS. Lemon Queen, Purity (white), Orange King (orange-scarlet), Miss Wil-mott (soft pink), Rose Queen Crimson, Mixed. Any of the above, pkt., 10c; 1/8 oz., 25c.

DAHLIA-FLOWERED—

Exquisite. Shades of rose.

Crimson Monarch. Largest red.

Old Rose. Real old rose shade.

Golden State. Very rich orange-yellow.

Oriole. Immense orange and gold.

Canary Bird. Rich canary-yellow.

Purple Prince. Deep purple.

Scarlet Flame. Bright scarlet with a blending of orange.

Dream. Deep lavender.

Polar Bear. Best white Zinnia.

Special Gold Medal Mixture.

Any of the above:

Pkt., 10c; 1/8 oz., 25c.

DOUBLE GIANT. Burnt Orange, Crimson, Deep Flesh, Purple, Scarlet, Shrimp-pink, White, Sulphur-yellow, Lavender, All Colors Mixed. Any of the above, pkt., 10c; 1/8 oz., 20c.

ELEGANS LILLIPUT, Finest Mixed. Pkt., 10c; 1/8 oz., 25c.

ELEGANS, Tall Double, All Sorts Mixed. Pkt., 10c; 1/8 oz., 30c.

FANTASY, Mixed. Very different from the other Zinnias. Pkt., 15c; 1/8 oz., 25c.

A choice selection of summer-flowering bulbs, including Gladioli, Cannas, Dahlias, Lilies, etc., will be found in our stores at reasonable prices.

We also make a specialty of garden tools and sundries of all descriptions.

INSECTICIDES AND FUNGICIDES

ANTROL. Best cure for ants. Set contains 4 jars and one 4-oz. bottle of syrup. 75c set. Syrup only, 4 ozs., 35c.

ANTROL. Ready filled sets containing four filled feeders of regular Antrol syrup 40c.

ACME ALL ROUND SPRAY. Used for combating blight and fungus diseases. Will destroy chewing insects in one application, and control sucking insects. 1/4-lb. can, 35c; 1 lb., 80c.

ACME APHIS SPRAY. A nicotine spray combining a fish oil soap with Black Leaf 40. 3-oz. tubes, 35c; 12 ozs., 95c.

ACME DAWG-GONE. Keeps dogs away from evergreens. Tubes, 35c each; 3 for \$1.00.

ARSENATE OF LEAD. For dusting and spraying. Gets rid of leaf eating insects. 1/2 lb., 20c; 1 lb., 30c.

BLACK LEAF 40. Solution of Nicotine Sulphate used as a spray for sucking insects. 1-oz. bottle, 35c; 5 ozs., \$1.00.

BORDEAUX MIXTURE, DRY. For curing and preventing black rot, mildew, blight, and other fungoid diseases. One lb. will make 5 gals. 1b., 30c.

DOG SHOO. Keeps dogs and cats away from evergreens and shrubs. Quart, 75c; Gallon, \$1.75.

DRY LIME-SULPHUR. 1b., 35c; 5 lbs., \$1.45.

FISH OIL SOAP. 1b., 30c; 5 lbs., \$1.25.

FLOWERS OF SULPHUR. 1b., 15c; 10 lbs., \$1.00.

MASTER ANT KILLER. 10c and 25c sizes.

NEW EVER GREEN. Non-poisonous insecticide. Can be used on cabbage, onions, celery, squash, and any other plant when infested with insects or bugs. 1-oz. bottle, 35c; 6-oz. bottle, \$1.00.

PARIS GREEN. 1b., 50c.

RED ARROW. Non-poisonous. One ounce will make 6 to 8 gals. of spray. Kills insects without injury to tenderest foliage. 1 oz., 35c; 4 ozs. \$1.00.

SELOCIDE. Kills red spiders. Quart, \$1.00.

SLUG SHOT. Guaranteed to destroy potato bugs and those on tomato and eggplants. 1 lb., 25c; 5 lbs., 75c.

SULPHATE OF IRON. For killing weeds and dandelions without injury to grass. 5 lbs., 45c.

TOBACCO DUST. Finely ground for dusting. 5 lbs., 35c.

TREE TANGLEFOOT. A paste preparation painted around trunk of tree to keep caterpillars, etc. from crawling into tree. 1-lb can. 60c.

TERRO. A sure cure for ants. 50c per bottle.

Michael-Leonard's Lawn Mixtures

LEONARD'S CHICAGO PARKS LAWN GRASS SEED. This is positively the highest grade of mixture that can be prepared. It is composed of the seed of the finest English and American grasses with White Clover so that with even ordinary care it cannot fail to make a beautiful lawn. For quickly producing a permanent thick and velvety sward this brand cannot be excelled. 15½-ounce Sifter Top Package, 35c; 5 lbs., \$1.65; 10 lbs., \$3.00.

SHADY NOOK LAWN GRASS. Usually it is quite difficult to obtain a satisfactory growth of grass under trees and in shady places. For sowing in such places we recommend the use of this special mixture. It will quickly produce an abundant and even growth of beautiful green grass. Per pound, 40c; 5 lbs., \$1.85; 10 lbs., \$3.50.

QUICK GROWING MIXTURE. A most reasonably priced mixture for new seeding when quick results are desired and low cost of seed is most important. This mixture contains all solid seed but does not produce as permanent a lawn as our Chicago Parks mixture. Lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00.

The mixtures described and priced are our standard mixtures. We can make up special mixtures for any purpose and we have the separate grasses.

KENTUCKY BLUE GRASS. Fancy recleaned seed. Lb., 35c; 5 lbs., \$1.65; 10 lbs., \$3.00.

WHITE CLOVER. Fancy recleaned seed. Lb., 55c; 5 lbs., \$2.50.

FANCY RED TOP. Extra heavy, fancy seed. Lb., 30c; 5 lbs., \$1.35; 10 lbs., \$2.50.

CHEWINGS FESCUE. A good grass for putting greens. Lb., 55c; 5 lbs., \$2.60; 10 lbs., \$5.00.

RED FESCUE. Lb., 60c; 5 lbs., \$2.85; 10 lbs., \$5.50.

ASTORIA BENT GRASS. Lb., \$1.25; 5 lbs., \$5.75.

SEASIDE BENT GRASS. Lb., \$1.25; 5 lbs., \$5.75.

POA ANNUA. Annual Blue Grass. Lb., \$1.00; 5 lbs., \$4.75.

WOOD MEADOW GRASS. Used in very shady places. Lb., \$1.00; 5 lbs., \$4.75; 10 lbs., \$9.25.

POA TRIVALIS. Rough Stalked Meadow Grass. Used mostly in pasture mixtures; also used on shady lawns. Lb., 50c; 5 lbs., \$2.35; 10 lbs., \$4.50.

ENGLISH BLUE GRASS OR MEADOW FESCUE. Used mostly in mixtures for pastures. Lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00.

ORCHARD GRASS. A coarse grass used mostly in mixtures for well-drained pastures. Lb., 35c; 5 lbs., \$1.65; 10 lbs., \$3.10.

TIMOTHY. The most valuable hay crop producer. Lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00.

ITALIAN RYE GRASS. Lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00.

DOMESTIC RYE GRASS. Lb., 20c; 5 lbs., 90c; 10 lbs., \$1.65.

Fertilizers

To produce large crops of the best quality vegetables, you must, above all, plant good seed to start with, and in addition to this use a sufficient amount of fertilizer to provide the proper amount of plant food necessary for healthy growth.

AMMONIA SULPHATE. For stimulating a rapid growth and large leaf development. 1 lb., 10c; 10 lbs., 60c; 25 lbs., \$1.00; 100 lbs., \$3.00.

BONE MEAL. A good all-around fertilizer especially good around roses and other flowers. 5 lbs., 35c; 10 lbs., 60c; 100 lbs., \$2.75.

HYDRATED LIME. A neutralizer for acid soils. 10 lbs., 35c; 100 lbs., \$2.00.

MILORGANITE. An all-organic grass fertilizer producing quick and lasting results. 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.50.

MURIATE OF POTASH. Good for root crops. 25 lbs., \$1.85; 100 lbs., \$4.50.

NITRATE OF SODA. Supplies nitrogen to soil, very active. Should be applied with a filler or as a liquid 5 lbs., 50c; 10 lbs., 90c; 100 lbs., \$4.50.

PEAT MOSS. A moisture retaining humus. Good for breaking up hard clay soils and to prevent hard top-crusting. Home garden size bales, \$2.25; large bales, \$4.00.

SHEEP MANURE. Pulverized. One of the most generally used of the animal manures, unequalled for general use. 5 lbs., 30c; 10 lbs., 50c; 100 lbs., \$2.25.

SUPER PHOSPHATE. 20 per cent. Used on crops requiring an excessive amount of phosphoric acid. 25 lbs., \$1.25; 100 lbs., \$2.85.

SHREDDED CATTLE MANURE. A good animal manure for lawn, garden, and flowers. 100 lbs., \$2.50.

VIGORO. A scientifically balanced plant food for lawns, gardens, shrubbery, and trees. 1 lb., 10c; 5 lbs., 45c; 10 lbs., 85c; 25 lbs., \$1.50; 50 lbs., \$2.50; 100 lbs., \$4.00.

IOWEALTH HYBRID FIELD CORN

The ability of HYBRID CORN to yield higher than open pollinated varieties of Corn is an established fact.

Thirteen years ago, Dr. Stuart N. Smith, Research Director of the Michael-Leonard Seed Company, undertook, in the company's various field laboratories, to develop a superior HYBRID which would enable the grower to produce Corn with the utmost profit and safety.

The result of this program of intensive in-breeding, selection and experimenting is IOWEALTH HYBRID.

IOWEALTH HYBRID is noted for its rich green foliage, its sturdy stalk and its abundant root system.

Insures wind resistance. Deep roots anchor plants. Never known to blow over.

Protects from heat and drought because deep roots reach moisture.

Excels in yield. Superiority in yield has been proved all over the UNITED STATES.

There is an IOWEALTH HYBRID which is particularly adapted and suitable for the season and growing conditions of your territory.

PRICES

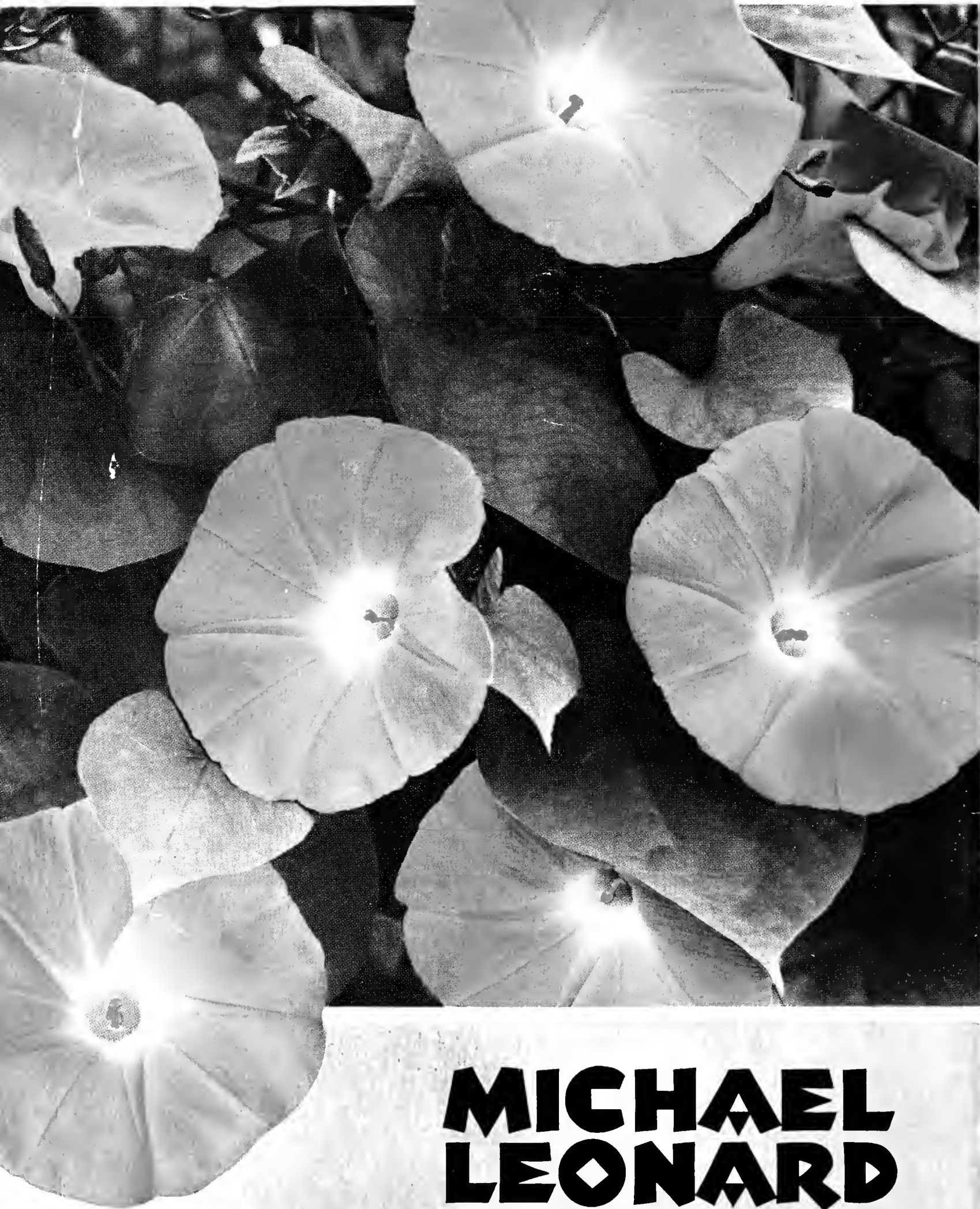
Standard Edge Grade \$8.00 per bu.

Special Plate Grades 6.50 per bu.

Large Round Grade 5.60 per bu.

Heavenly Blue

Morning Glories



**MICHAEL
LEONARD
SEED CO.**

SIOUX CITY, IOWA